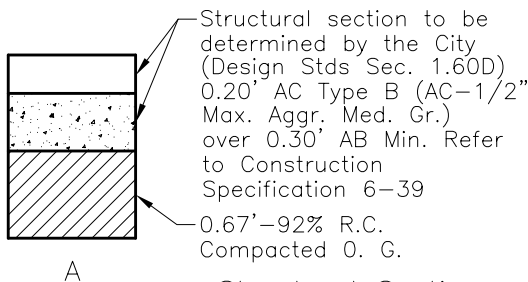
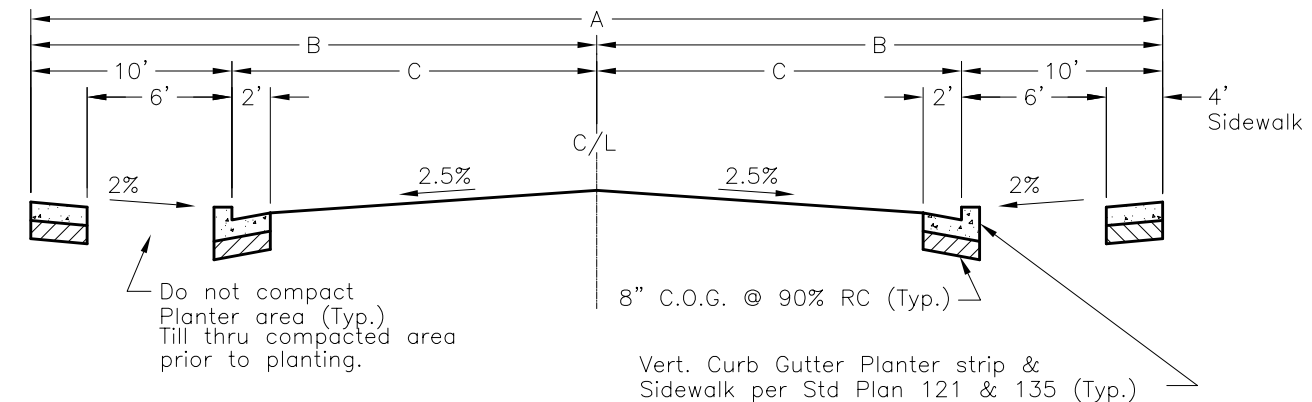
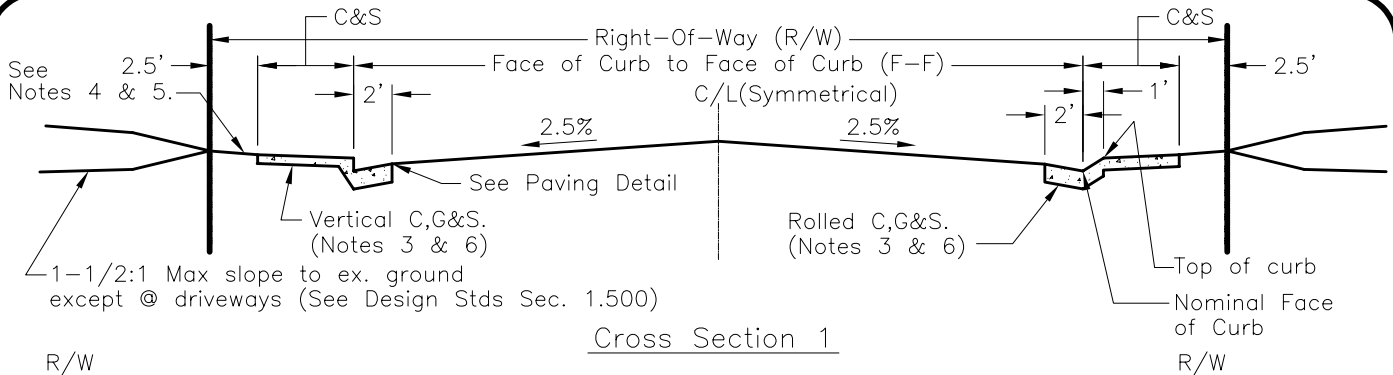




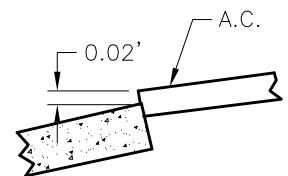
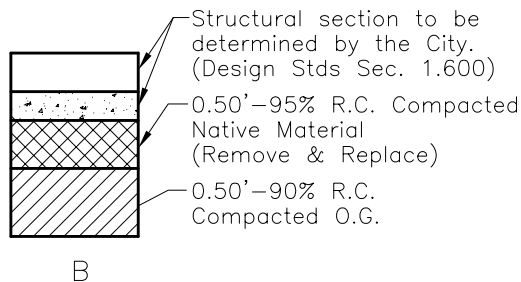
# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## STREET SECTIONS



Structural Section



Paving Detail at TOE

### Notes:

1. See City Public Improvement Design Stds. Sec. 1 for general design requirements.
2. Widening at intersections to provide additional lanes may be required.
3. See Std. Plans 135 and 136 for Vertical and Rolled C,G&S respectively.
4. The area between the R/W and back of sidewalk shall be graded to 0.02' per ft and properly compacted to prevent settlement. Where wider sidewalk is required (ie. commercial areas, around hydrants, poles etc) sidewalk specifications apply.
5. Private use of the R/W subject to Encroachment Permit requirements and Design Standards Sections 1.400 & 1.500.
6. See Design Stds. Section 1.500 for curb & gutter type criteria.

Sheet 1 of 2

Dr. KT	No.	Date	Revision	Appr.	Approved By:	12/28/00	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	Date	101
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895		



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Street Sections

<u>Street Classification</u>	<u>(A) R/W</u>	<u>(2xC) F-F</u>	<u>Min. C&amp;S</u>	<u>Cross Section</u>	<u>Structural Section</u>
Minor Residential	50'	34'	5.5' Rolled	1	A
Minor Residential	50'	30'	5.5' Vertical	2	A
Standard Residential	55'	39'	5.5' Rolled	1	A
Standard Residential	55'	35'	5.5' Vertical	2	A
Minor Collector	60'	44'	5.5' Vertical	1	B
Major Collector	68'	52'	5.5' Vertical	1	B
Industrial (Local)	66'	52'	4.5' Vertical	1	B
Secondary Arterial	80'	64'	5.5' Vertical	1	B
Four-Lane Undivided					
Minor Arterial	94'	76'	5.5' Vertical	1	B
Four-Lane Divided					
Major Arterial	118'	102'	5.5' Vertical	1	B
Six-Lane Divided					

Section Dimension Table

Sheet 2 of 2

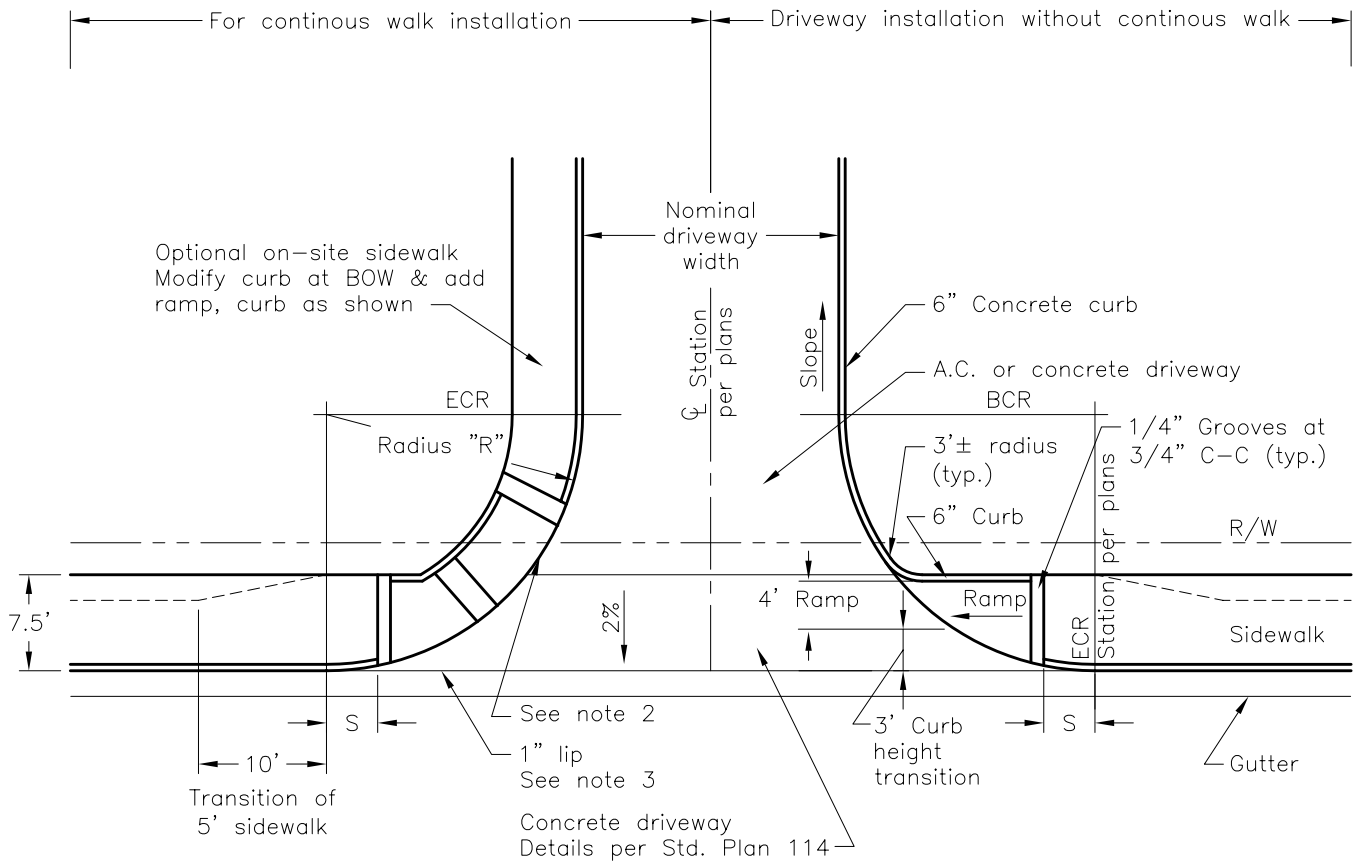
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	101
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Special Commercial Driveway



Plan

"R"	"S"
15'	3'
20'	4'
25'	5'
30'	6'
35'	7'

### Notes:

1. Special Commercial Driveway to be used only where required or specifically approved by the Public Works Director.
2. See Std. Plan 132 for wheelchair ramp details.
3. Provide in-line catch basin if depth of flow in gutter exceeds 3".

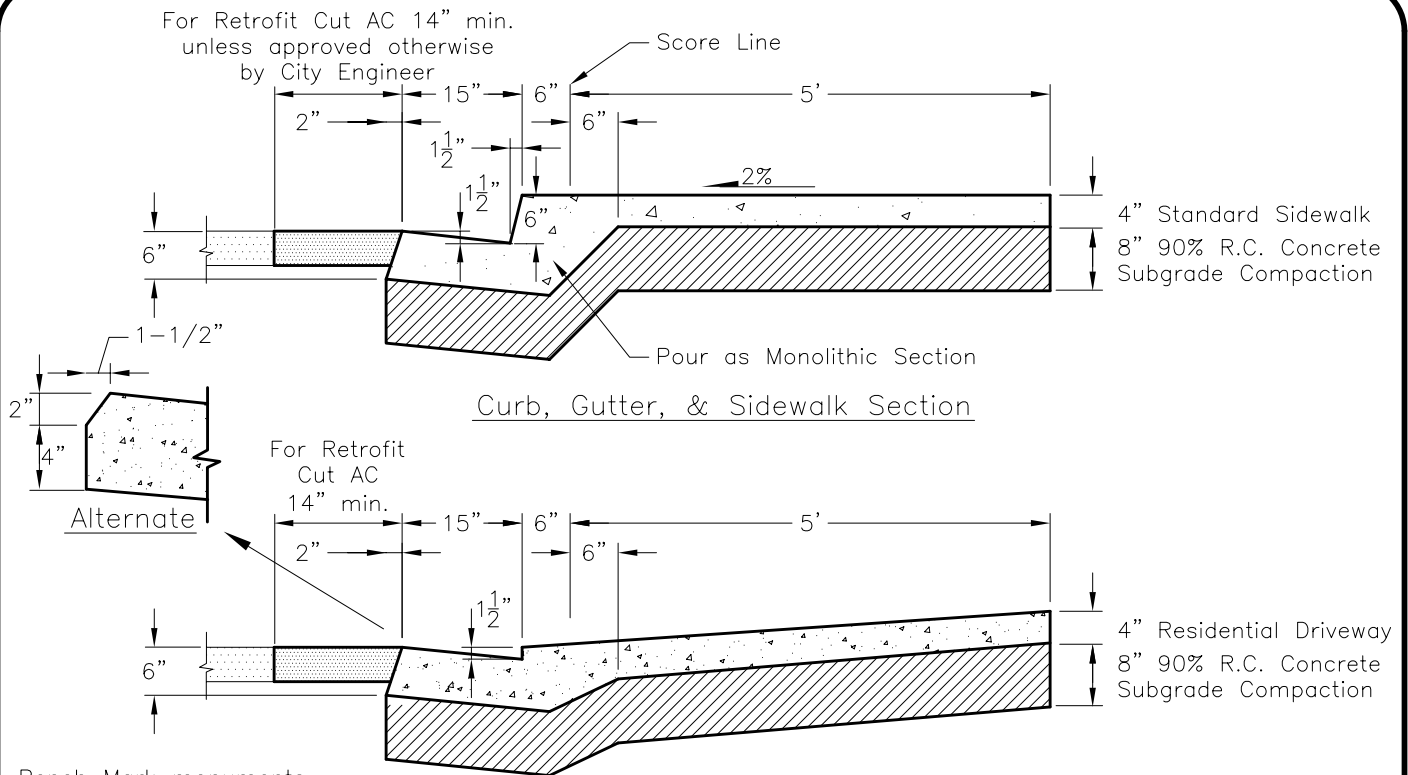
Dr. KT	No.	Date	Revision	Appr.	Approved By:	12/28/00	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>		111
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	Date	



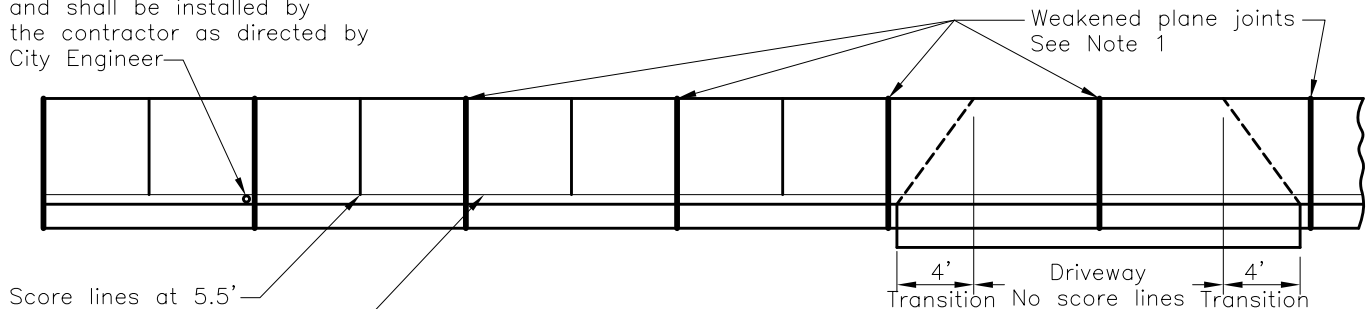
# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Square-Type Curb, Gutter, Sidewalk and Residential Driveway



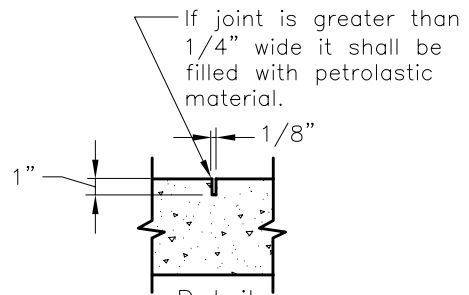
Bench Mark monuments  
will be furnished by the  
City of Lodi, when required,  
and shall be installed by  
the contractor as directed by  
City Engineer



Ramp Typical Details  
Std. Plan 132A, B, & C

### Notes:

1. Construct weakened plane joints at 11' interval to match score lines.
2. Use impervious membrane cure. Broom finish.
3. Class B concrete per Section 90 of Std. Spec., 1-1/2" max. aggregate.
4. Construct expansion joints at 200' max.
5. All exposed edges shall be rounded to 1/2" radius.



Weakened Plane Joint

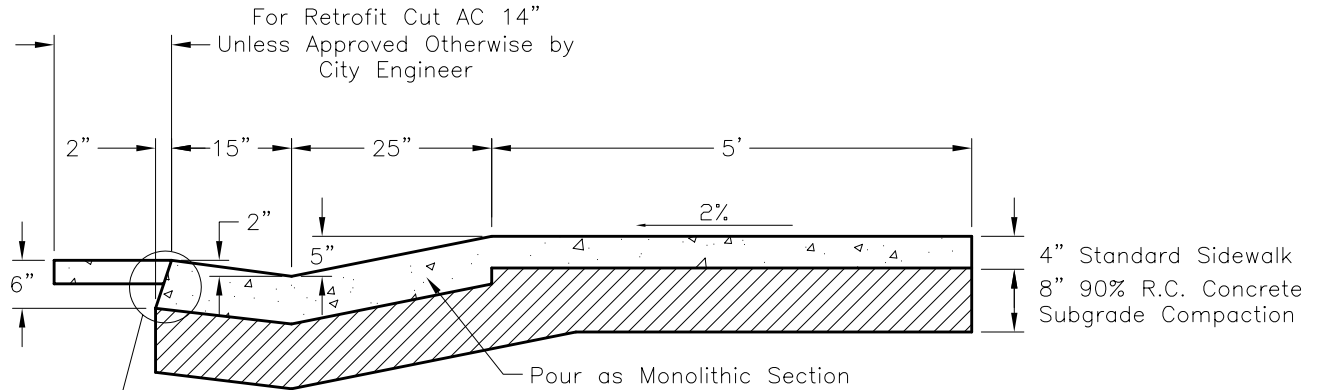
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	112
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date



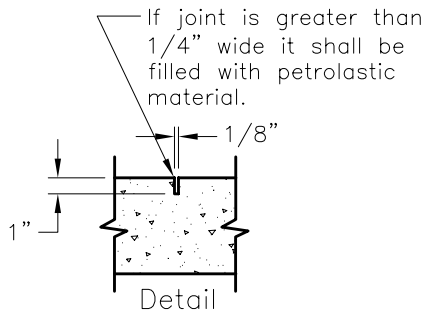
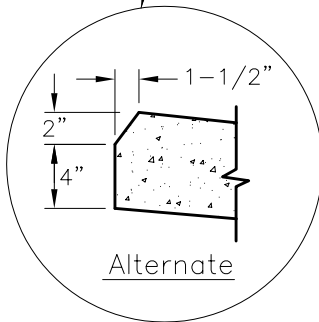
# CITY OF LODI

PUBLIC WORKS DEPARTMENT

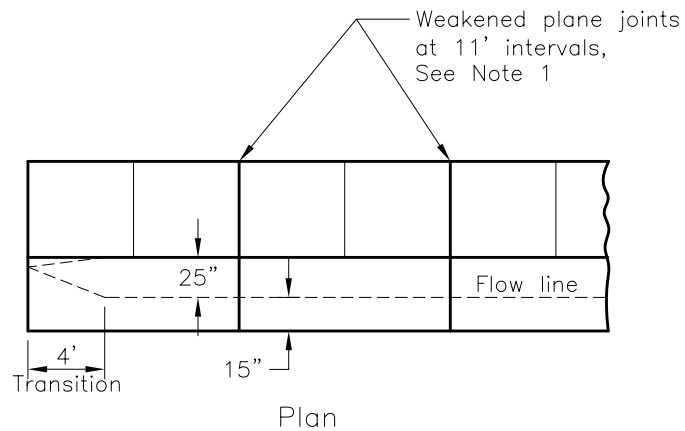
## Driveway-Type Curb, Gutter & Sidewalk



Curb, Gutter, & Sidewalk Section



Weakened Plane Joint



### Notes:

1. Construct weakened plane joints at 11' interval to match score lines.
2. Use impervious membrane cure. Broom finish.
3. Class B concrete per Section 90 of Std. Spec., 1-1/2" max. aggregate.
4. Construct expansion joints at 200' max.
5. All exposed edges shall be rounded to 1/2" radius.

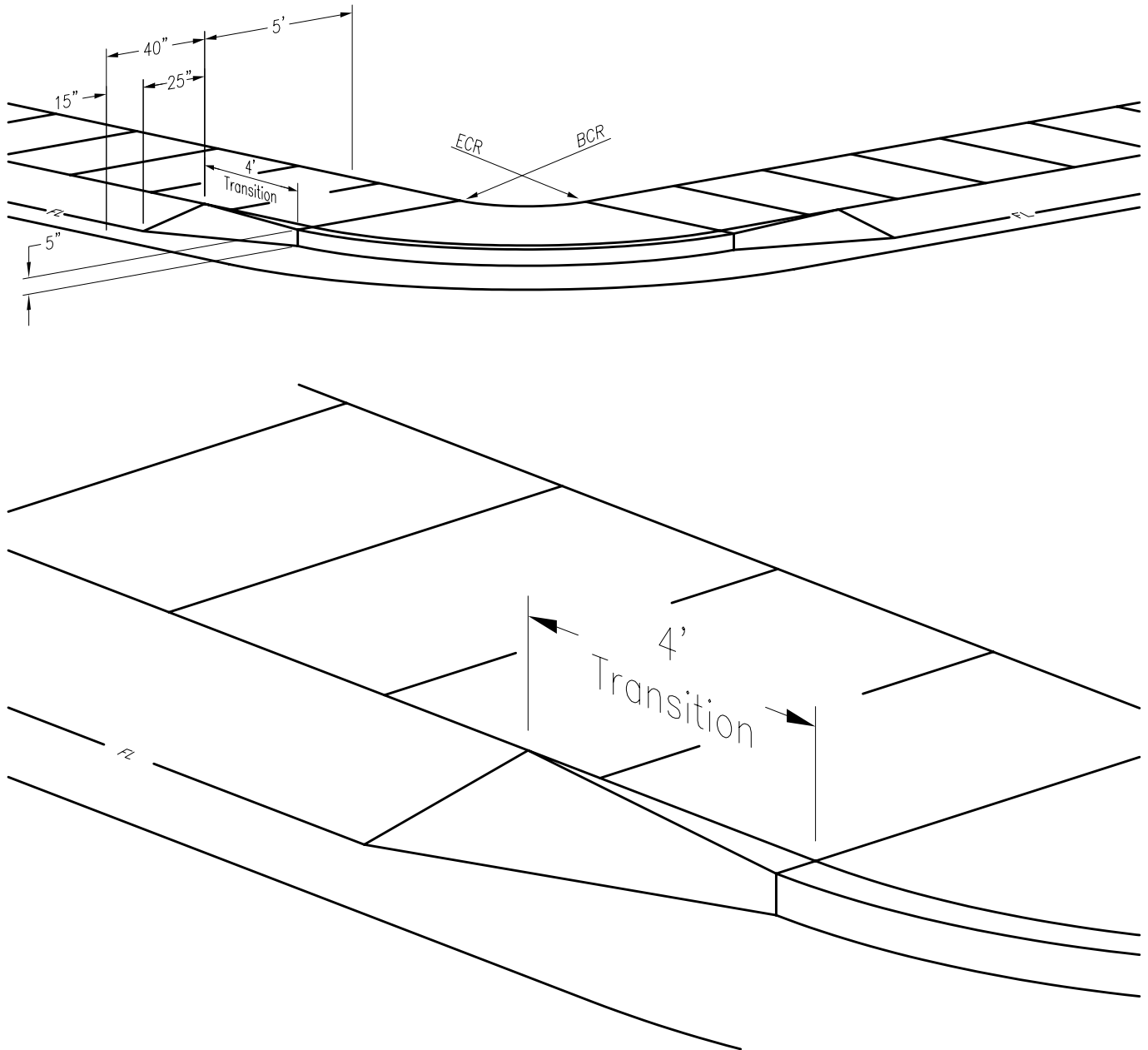
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	113A
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Curb Return Transition



### Notes:

1. For Driveway-Type C,G & S  
See Std. Plan 113A.

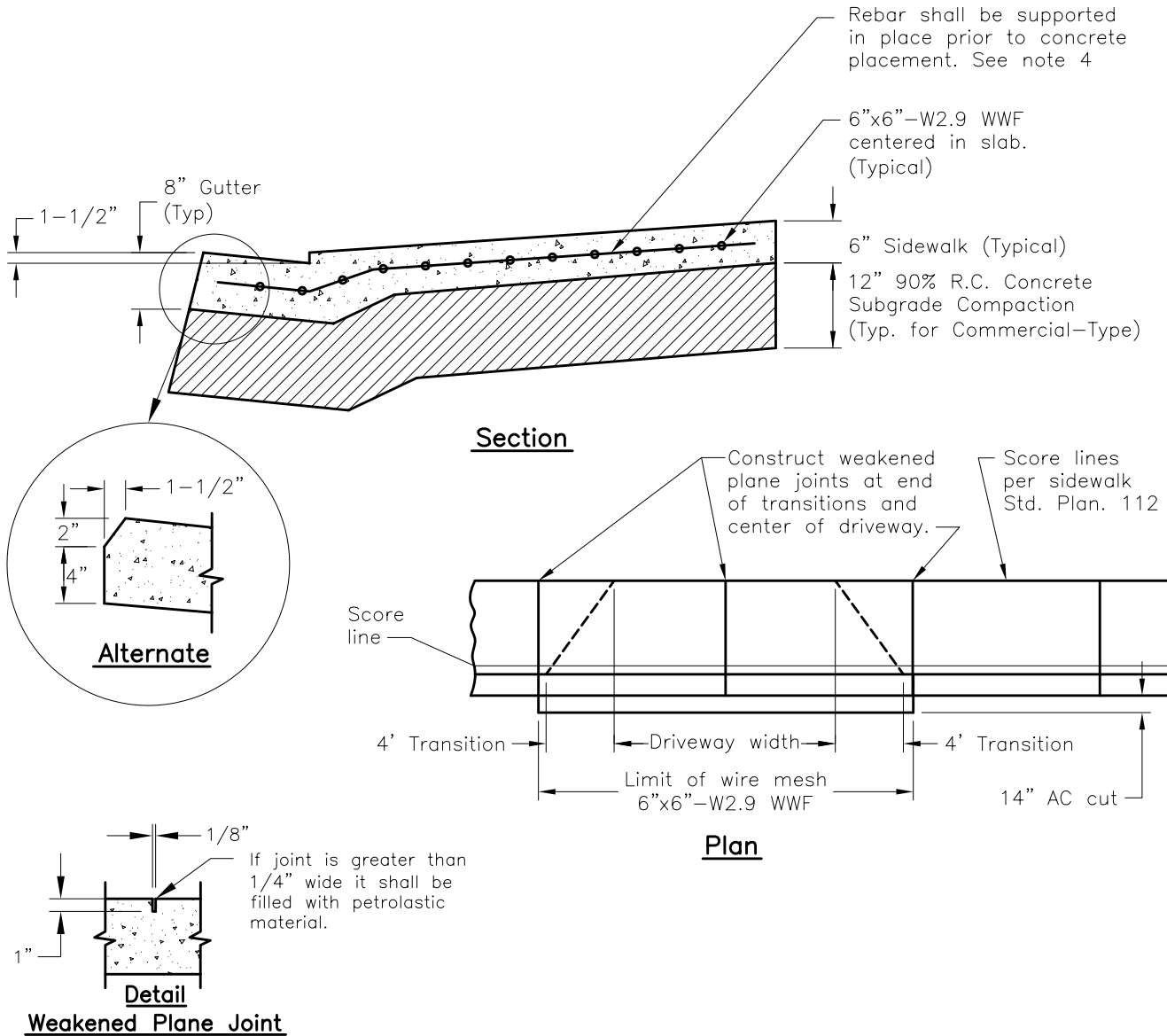
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	113B
Date					City Engineer	
12/00					R.C.E. 39895	
					12/28/00	
					Date	



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Commercial-Type Gutter & Driveway



### Notes:

1. Use impervious membrane cure. Broom finish.
2. Class B concrete per Section 90 of Std. Spec., 1-1/2" max. aggregate.
3. All exposed edges shall be rounded to 1/2" radius.
4. #4 rebars may be substituted for mesh when approved by the Engineer.

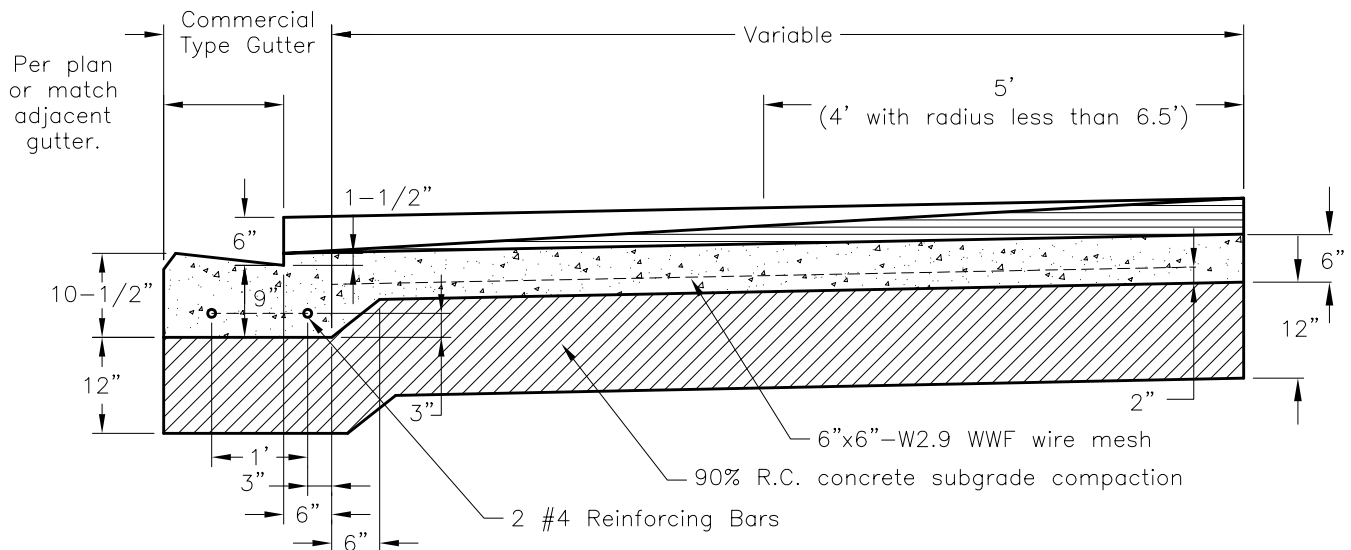
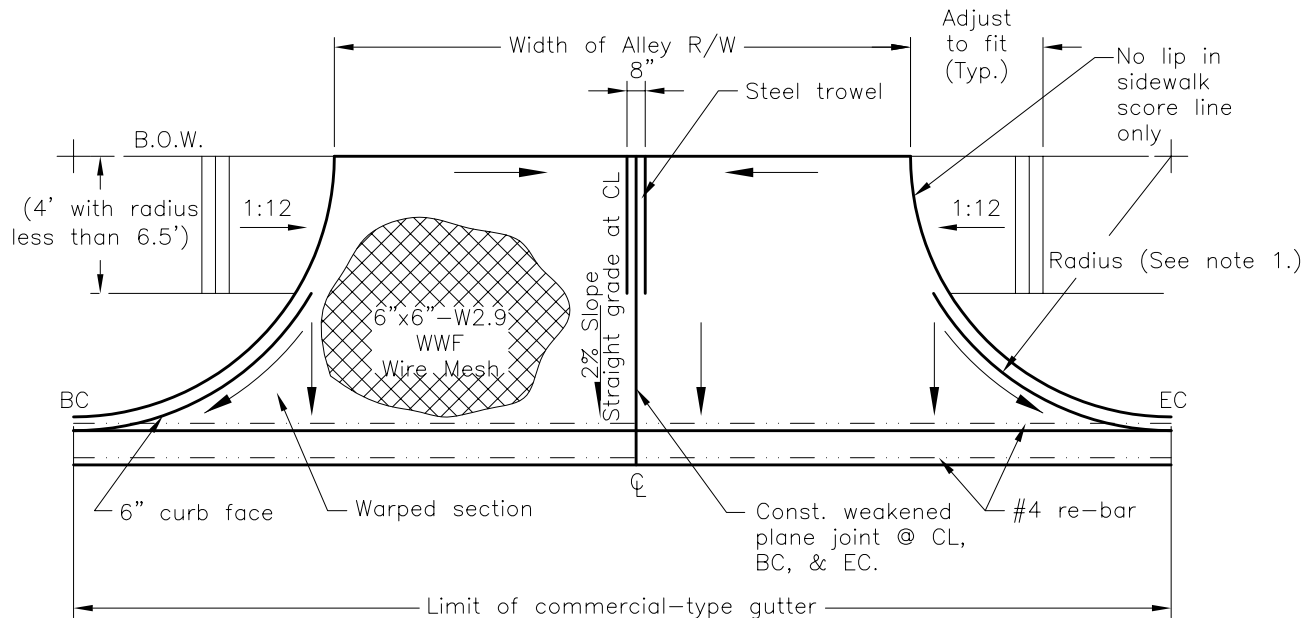
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS	1	9/25	ADDED FL HEIGHT DIMENSION		<i>F. Wally Sandelin</i>	114
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	9/25/02 Date



# CITY OF LODI

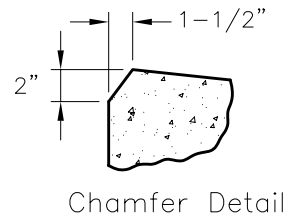
PUBLIC WORKS DEPARTMENT

## Concrete Alley Approach



### Notes:

1. Radius equals distance from face of curb to back of sidewalk or from face of curb to property line if no sidewalk exists.
2. Use impervious membrane cure. Broom finish.
3. Class B concrete per Section 90 of Std. Spec., 1-1/2" max. aggregate.
4. #4 bars 12" O. C. may be substituted for mesh when approved by the Engineer.



Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	115
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date

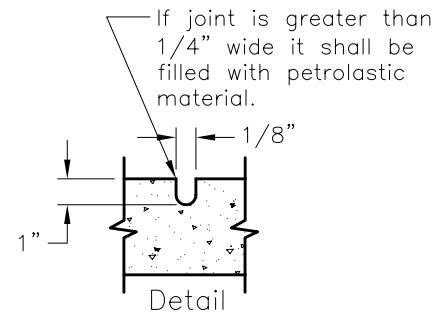
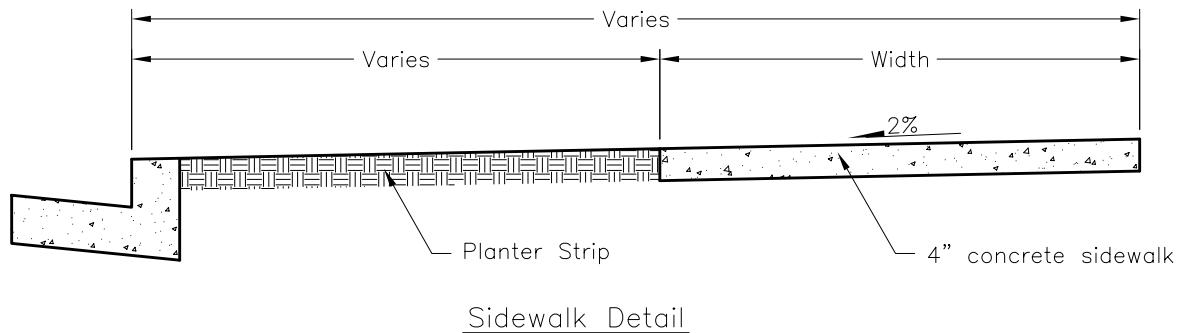
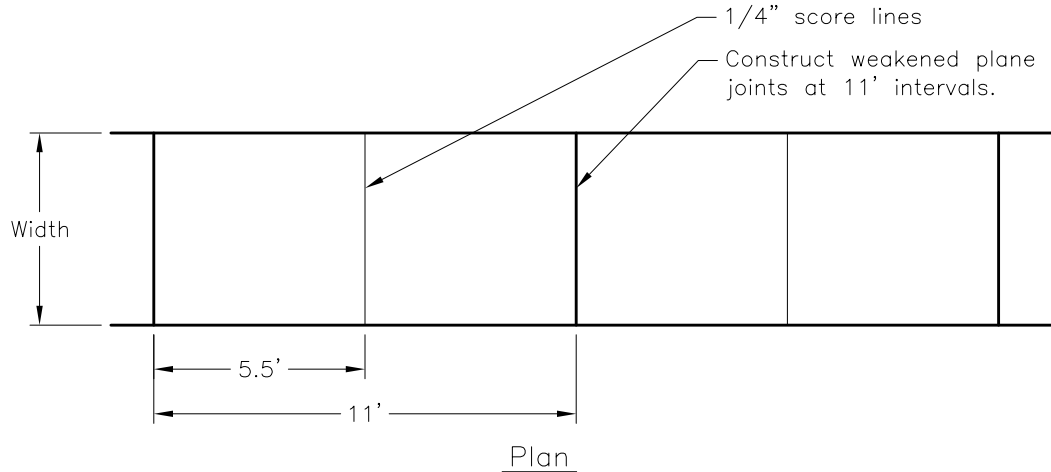




# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Sidewalk Repair



Weakened Plane Joint

### Notes:

1. Match width with adjacent existing sidewalk.  
For replacement less than 11' match scoring pattern.
2. Concrete shall be 2500 psi @ 28 days. Max. 4" slump.  
For jobs less than one yard, no static trailer mix, mixer trailer may be used.
3. Construct sidewalk on firm stable subgrade.
4. Light broom finish.
5. Impervious membrane cure.

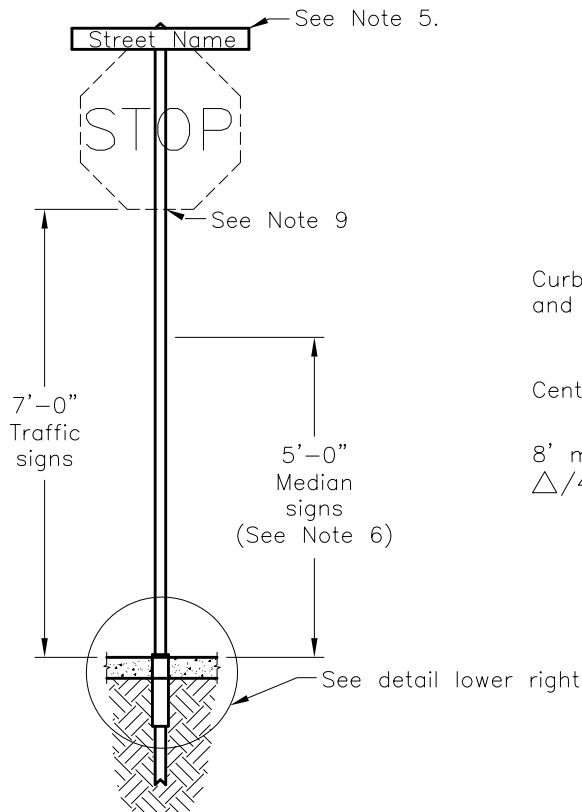
Dr. KT	No.	Date	Revision	Appr.	Approved By:	12/28/00	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	Date	117
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895		



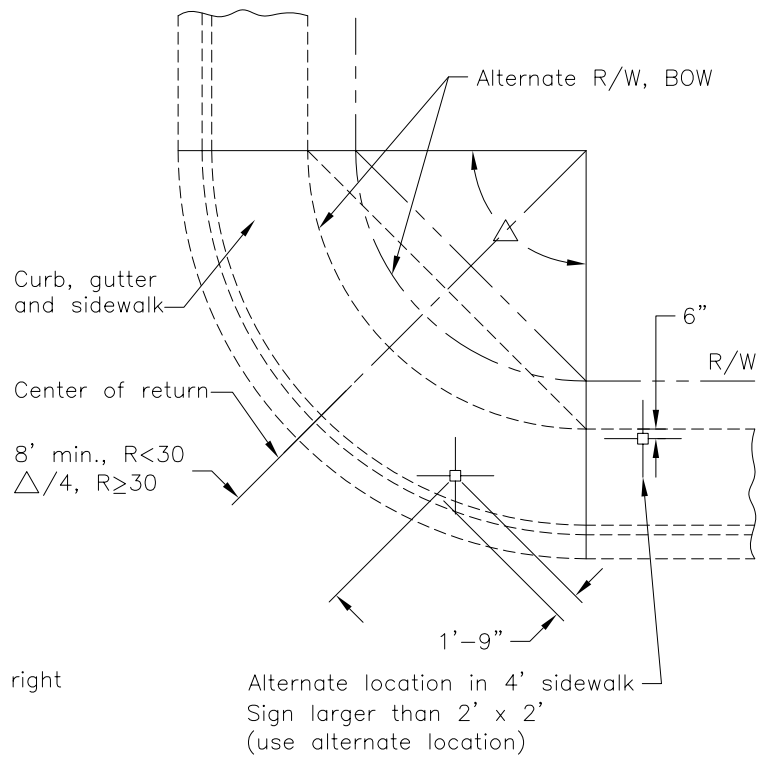
# CITY OF LODI

PUBLIC WORKS DEPARTMENT

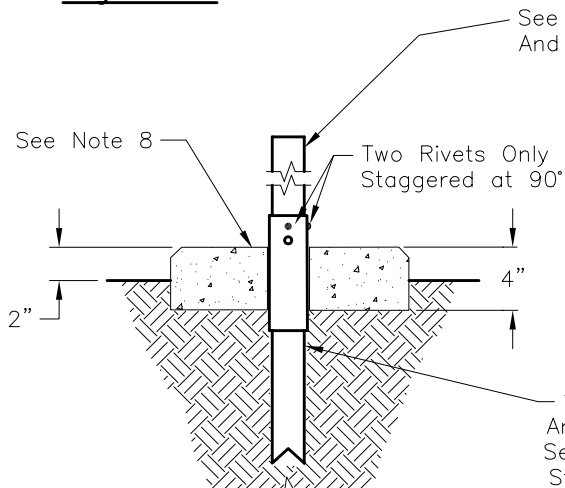
## Sign Post Installation



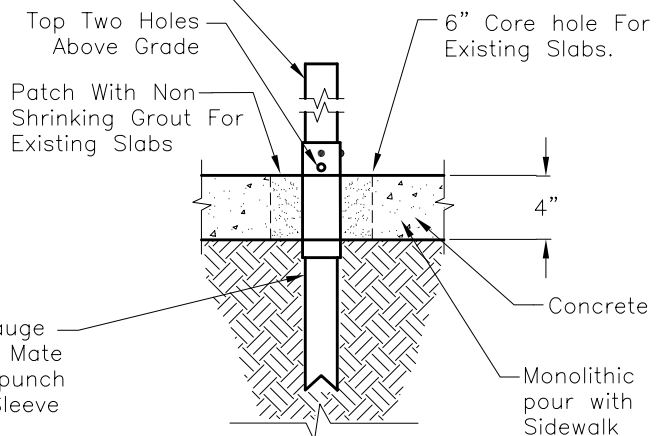
Sign Post



Sign Post Location



Dirt Location



Sidewalk Location

Page 1 of 2

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
	1	9/25	Changed 2"Ø Pipe to 2" Sq.		<i>F. Wally Sandelin</i>	119
Ch. WS	2	2/04	MOVED NOTES TO SECOND PAGE		2/12/04	
Date 12/00					Date	



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Sign Post Installation

### Notes:

1. Concrete For Post Installation May Be Class C Concrete.
2. Posts shall be new 2"x 2" 14 gauge galv. tube set plumb.
3. When Sign Square Footage Is 7.5 Square Feet or More Post Shall Be 2" x 2" 12 Gauge galv. Tube.
4. Posts Shall Be Select Punch Both Ends, 12" from bottom end and no greater than sign height at top end, on four Sides.
5. Street Name And Traffic Signs Per Std Plan 142, a min. vertical clearance of 9'-6" at locations with street name signs only.
6. R10's (one way signs) To Be Located 1.5' from bottom of sign When placed in the median.
7. A Powder Coat (Downtown Green) Is Required For Downtown Locations. Form And Edge 12" x 12" Concrete Apron in dirt locations.
8. 4" Thick In Dirt Locations, When Required By Engineer.
9. Min. vertical clearance of 6'-6" at locations with multiple signs. (not including street name signs.)

Page 2 of 2

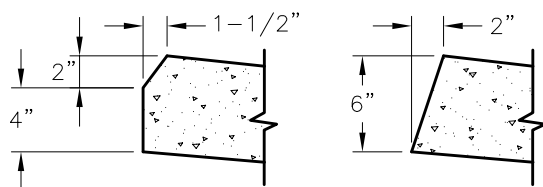
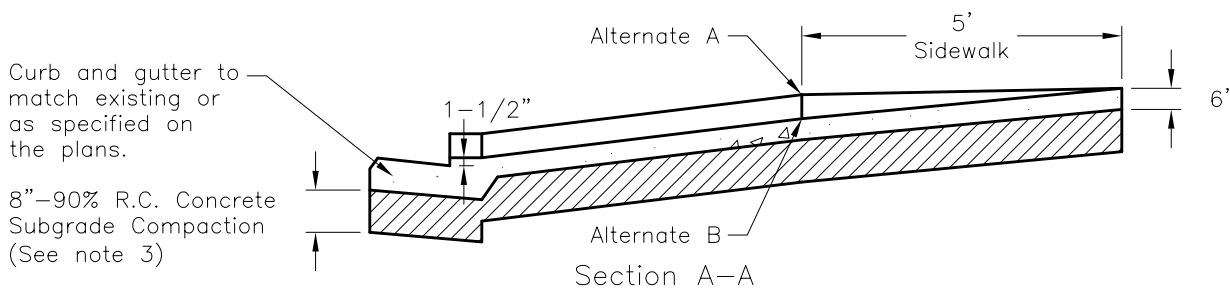
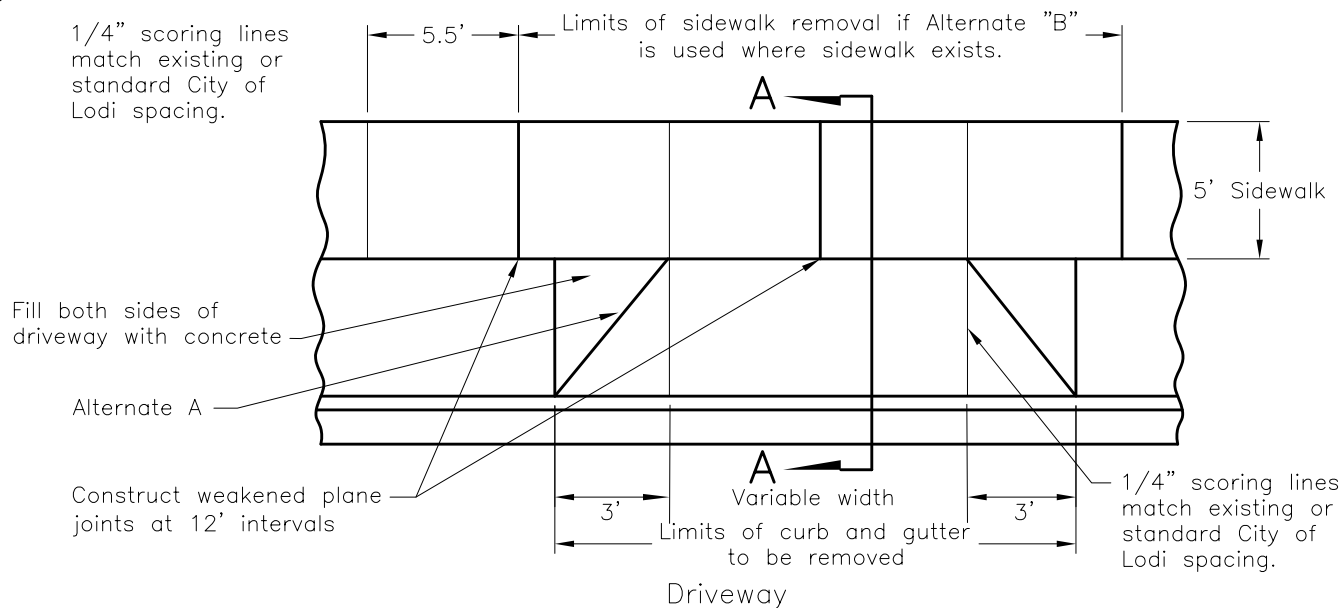
Dr. GWC	No. 1	Date 2/04	Revision ADDITION OF SECOND PAGE	Appr.	Approved By: <i>F. Wally Sandell</i>	STD PLAN
Ch. WS					<i>F. Wally Sandell</i> 2/12/04	119
Date					F. Wally Sandell City Engineer R.C.E. 39895	



# CITY OF LODI

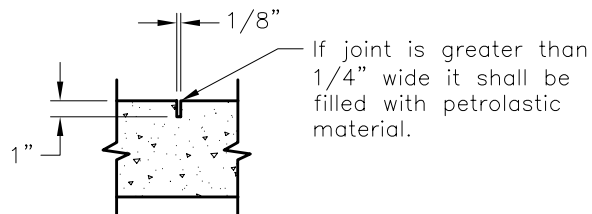
PUBLIC WORKS DEPARTMENT

## Sidewalk and Driveway with Planting Strip



Detail

Alternate Toe Configurations



Detail

Weakened Plane Joint

### Notes:

1. Alternate "A" shall be used, except where the driveway slope approaches 3 inches per foot. It may then be necessary to use Alternate "B".
2. When Alternate "B" is used sidewalk shall be removed to nearest score-mark by sawing. When the sidewalk is replaced the existing scoring pattern shall be maintained.
3. Additional compaction is not required where existing curb and gutter, sidewalk, and/or driveway are being removed and replaced.
4. Class B concrete per Section 90 of Std. Specs, 1-1/2" max. aggregate with impervious membrane cure and light broom finish.

Dr. K	No.	Date	Revision	Appr.	Approved By:	STD PLAN
	1	9/25	ADDED SCORE LINES			
Ch. WS	2	2/04	ADDED FILL AREA IN PARKWAY			
Date						
12/00						

2/12/04  
Date

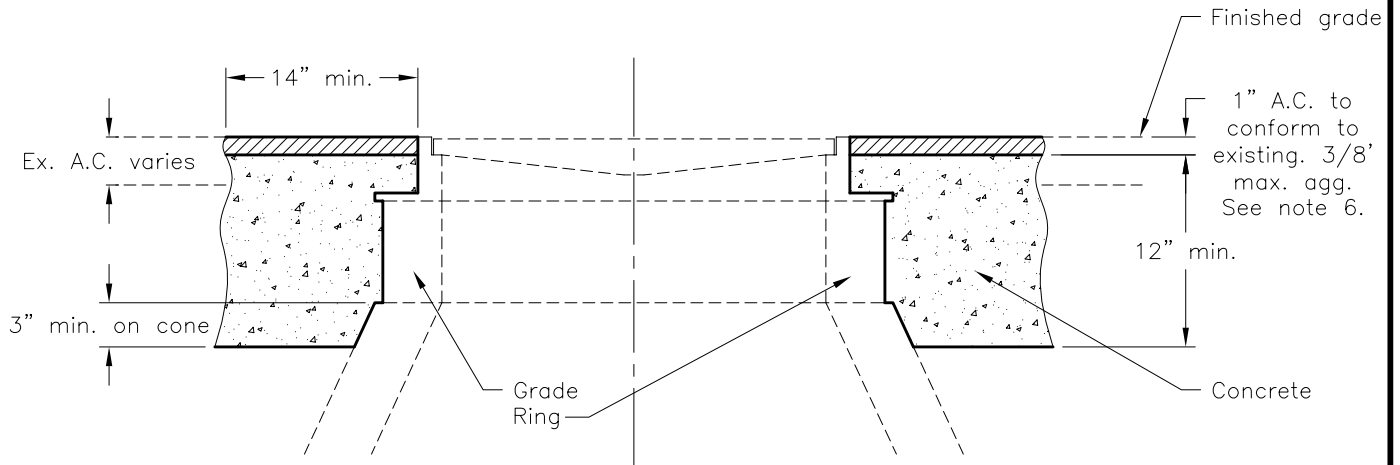
121



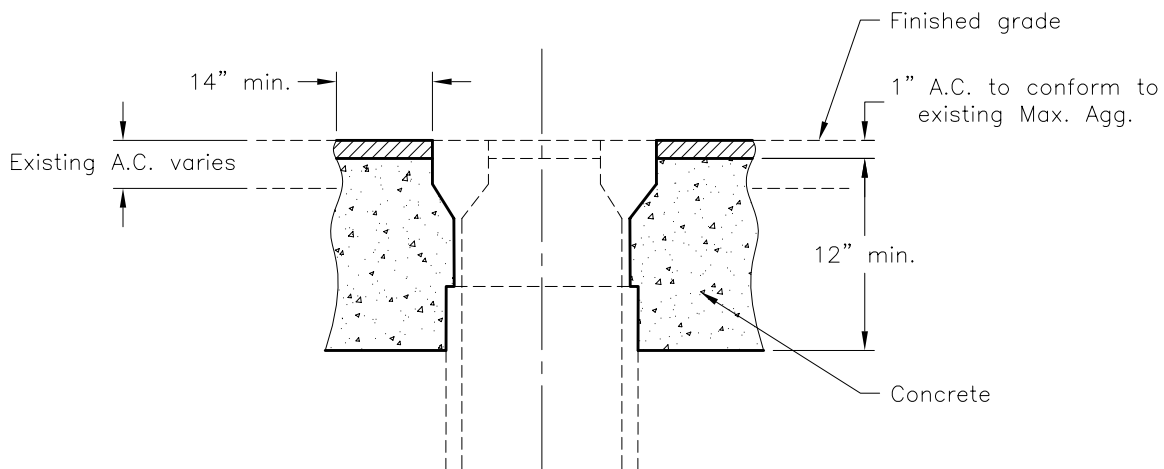
# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Frame and Cover Adjustment



Manhole & Riser



Water Valve  
(Monument Box similar)

### Notes:

1. This detail shall be used where frame and covers are being adjusted to grade.
2. Class B Concrete shall be used. Finish shall be rough.
3. Concrete shall be placed against neatly edged excavation.
4. Frames shall match ex. finished grade within 1/8".
5. Tack the area to be paved, prior to placement of AC.
6. A.C. may be 1/2' max. agg. only with prior approval of City Engineer.

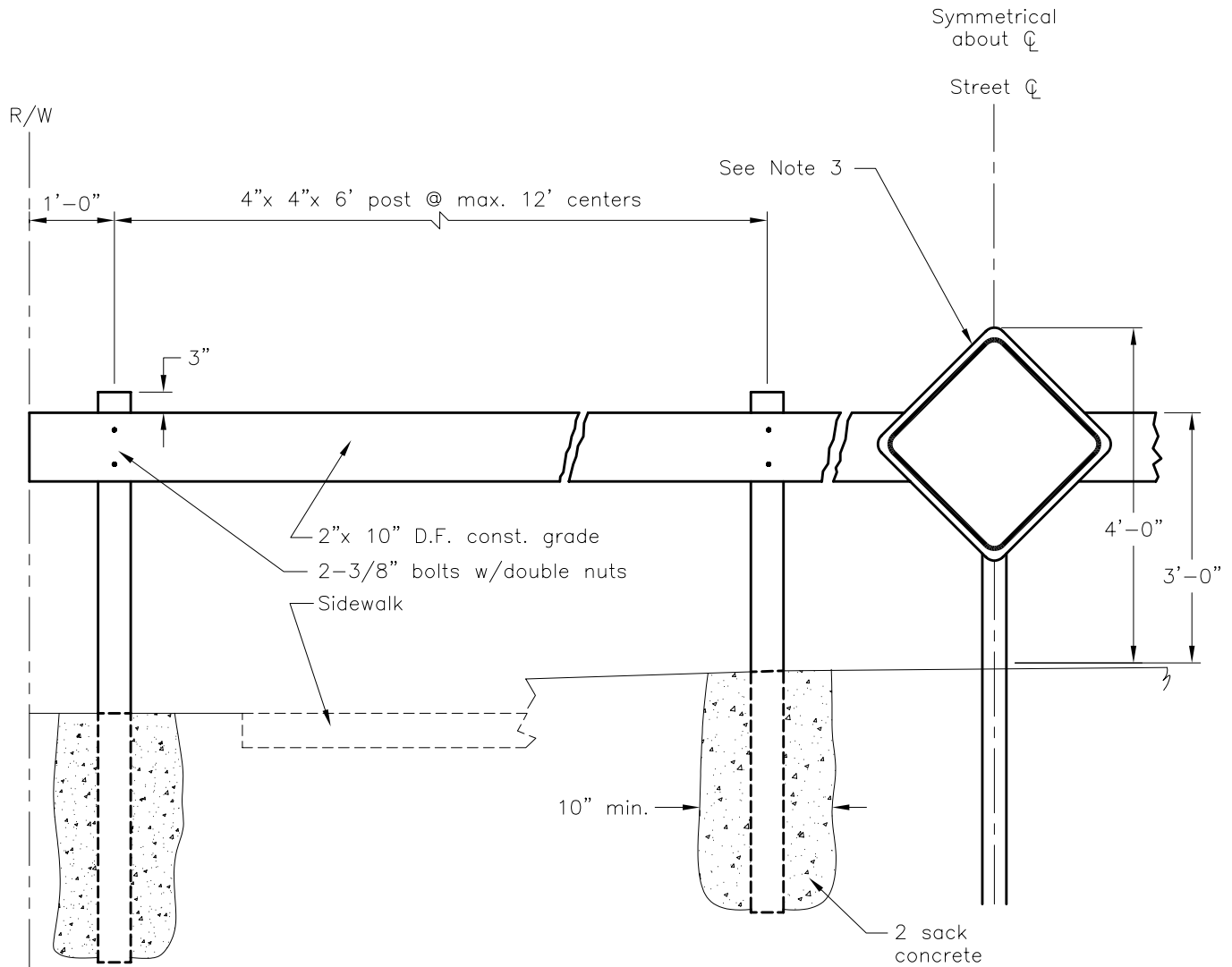
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	123
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Dead-End Barricade



### Notes:

1. All posts shall be redwood or plastic.
2. Entire barrier shall be painted white—3 coats.
3. Install one fully reflective red Type N Marker 18"x 18" at centerline.  
(& 12' right of CL when c-c width is over 60'.)  
Backing: 0.080 in aluminum 6061T6 alloy.  
Reflectorization: Wide angle flat top Scotchlite high intensity reflective sheeting.  
Mount with 5/16  $\phi$  bolts w/double nuts.
4. Servicable portions of barricades being removed may be reused at new locations as approved by the Engineer.

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	128
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date



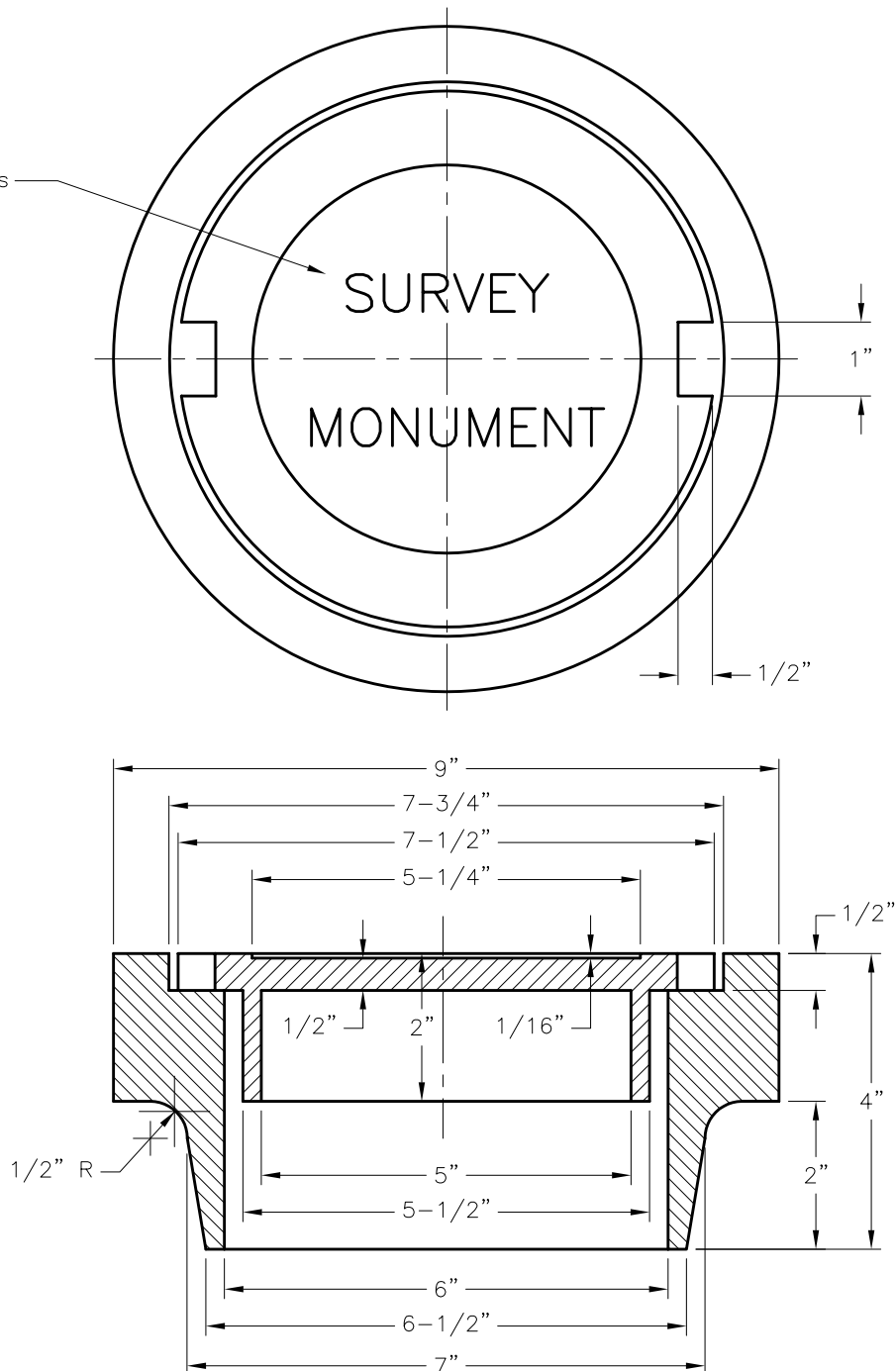


# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Survey Monument Assembly (6")

1/2" pattern letters



### Notes:

1. Frame — Approx. wt. 22 lbs.
2. Cover — Approx. wt. 7 lbs.
3. Material — Cast Iron

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS	1	2/04	REVISED FRAME DIMENSION		<i>F. Wally Sandelin</i>	130
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	2/12/04 Date



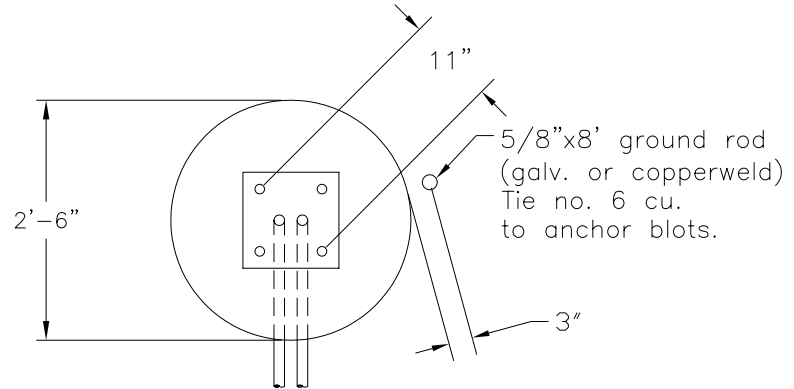


# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Street Light Foundation for Future Installation

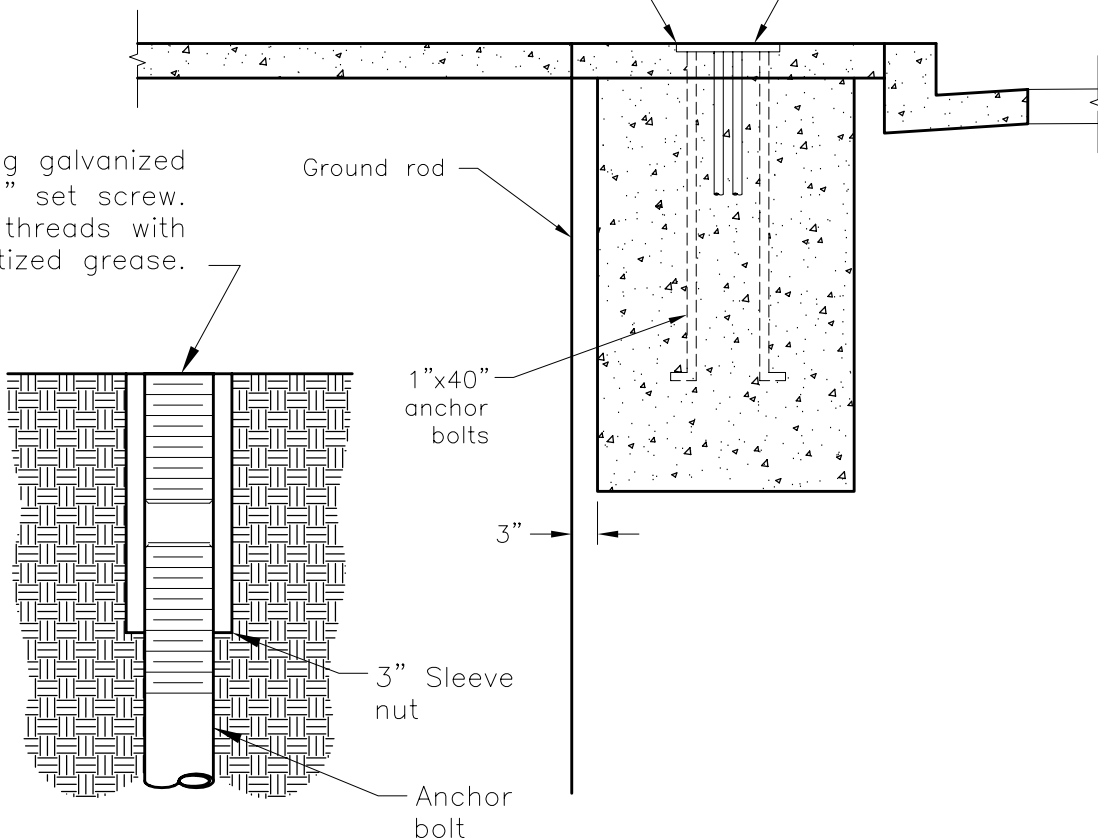
Bond all conduit and anchor bolts with no. 6 cu.



13" square  
level in both  
directions

Install conduit coupling  
flush with top of  
sidewalk, cap with  
recessed pipe plug,  
and lubricate with  
graphitized grease.

1-1/2" long galvanized  
"Allen Head" set screw.  
Lubricate threads with  
graphitized grease.



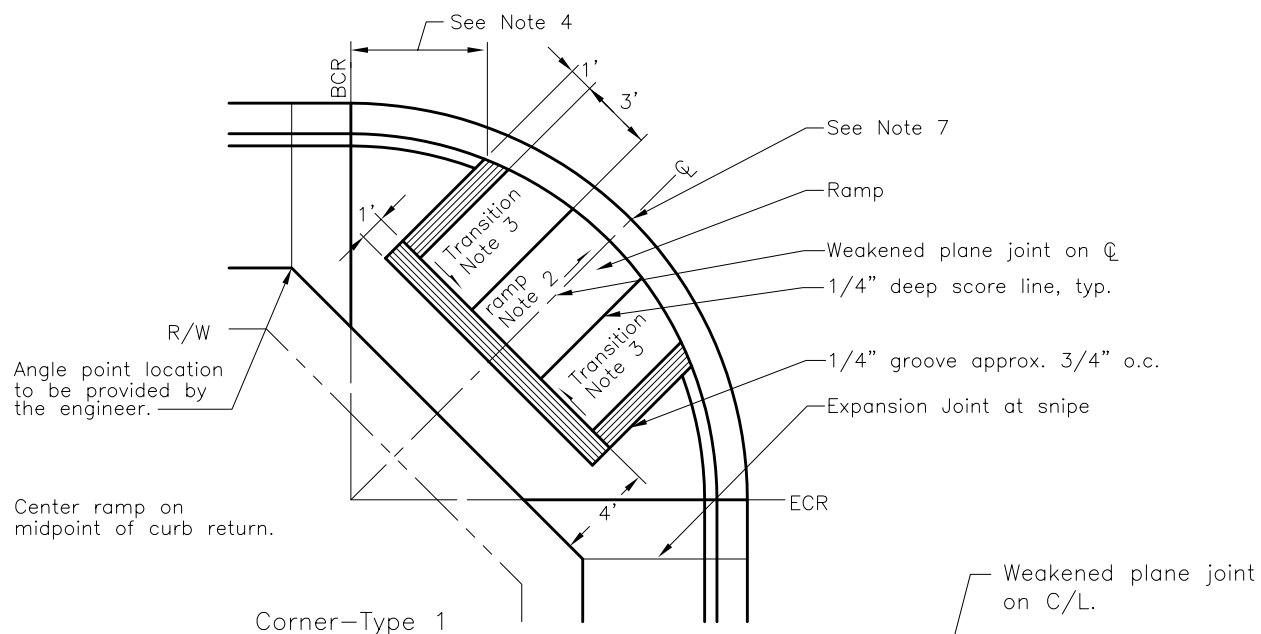
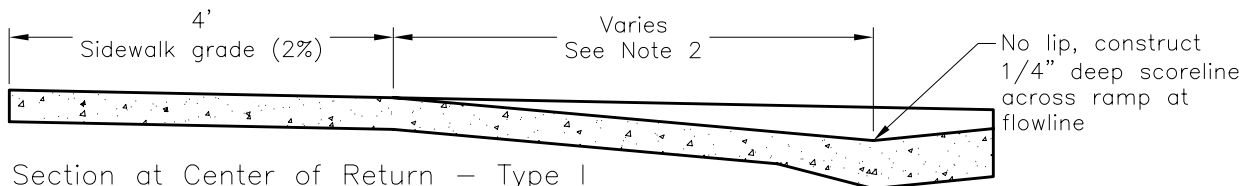
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	131
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	9/25/02 Date



# CITY OF LODI

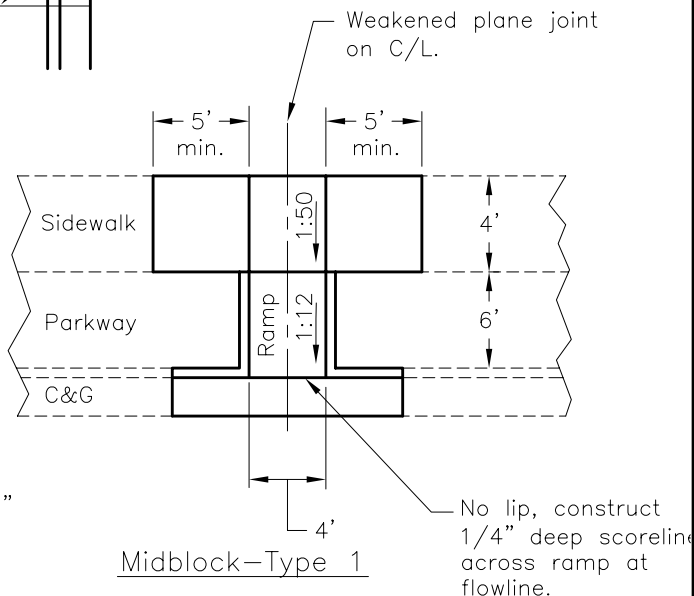
PUBLIC WORKS DEPARTMENT

## Type 1 Handicap Ramp



### Notes:

1. Curb return radius as specified.
2. Ramp slope 1:12 maximum, 1:15 minimum.
3. Transition slope 1:10 maximum.
4. For 6" curb height, transition curb height to 4-1/2" from expansion joint to beginning of "transition".
5. See Std. Plan 611 for layout dimensions.
6. The concrete finish of the ramp shall have a transverse broomed surface texture rougher than the surrounding sidewalk.
7. The gutter pan across the route of travel from the ramp to the street shall have a maximum rise of 5%.



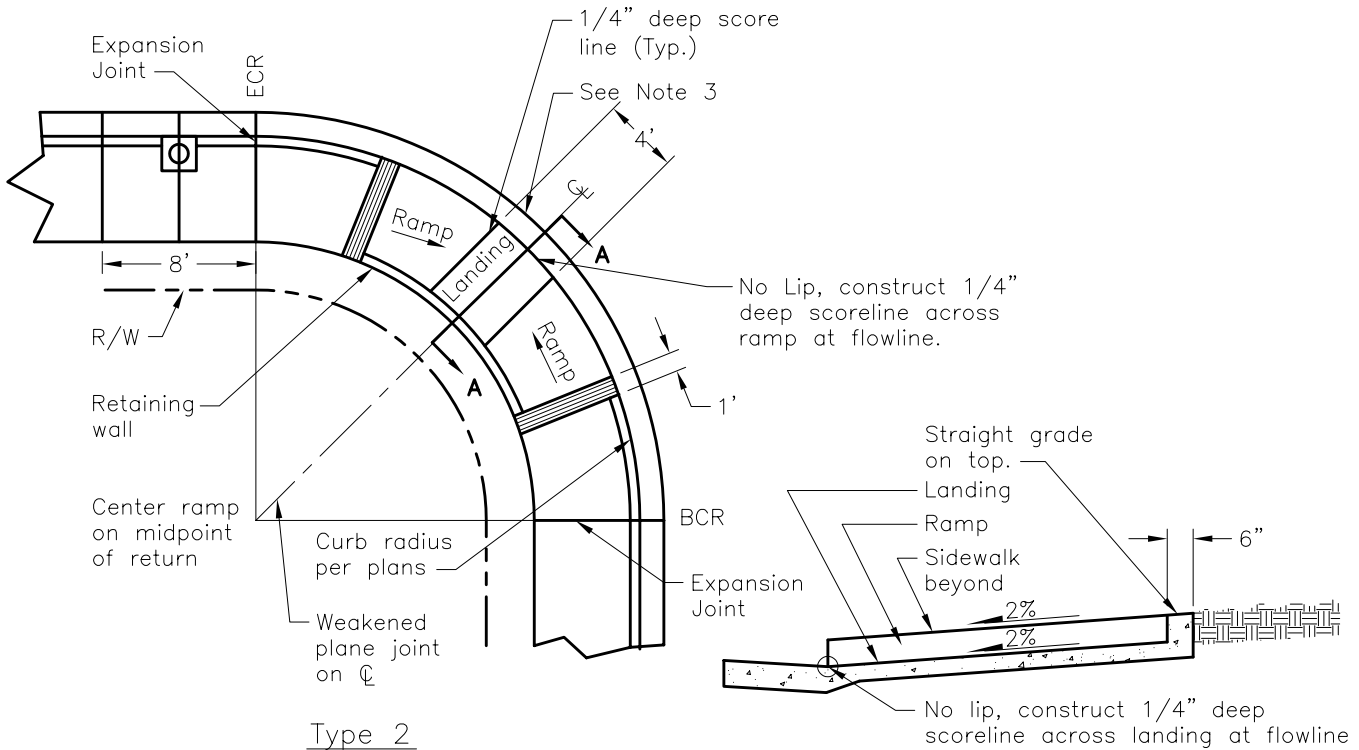
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS	1	9/25	REVISED MIDBLOCK LAYOUT		<i>F. Wally Sandelin</i>	132A
Date 12/00	2	2/04	REVISED BOW DIMENSION		2/12/04	
					Date	



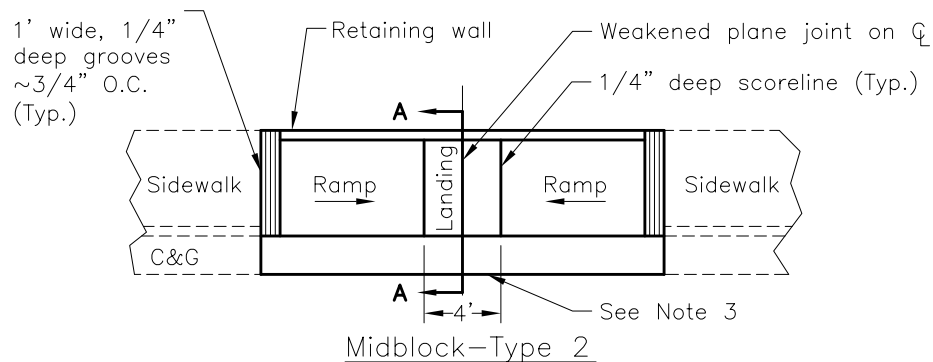
# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Type 2 Handicap Ramp



### Section A-A



### Notes:

1. Ramp slope 1:12 maximum 1:15 minimum. 2% max. sidewalk crossfall.
2. The concrete finish of the ramp shall have a transverse broomed surface texture rougher than the surrounding sidewalk. The landing shall have a coarse broom finish.
3. The gutter pan across the route of travel from the ramp to the street shall have a maximum rise of 5%.

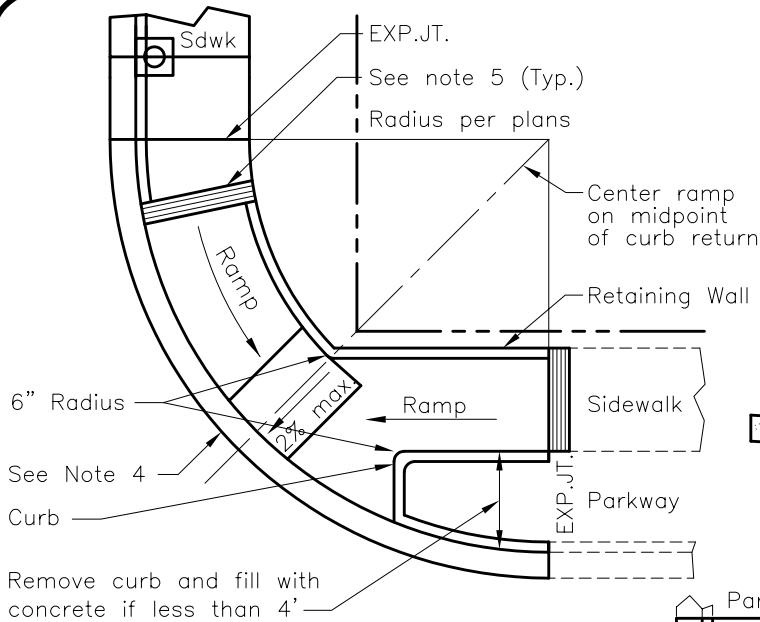
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS	1	9/25	UPDATE PER FIRST REVISION		<i>F. Wally Sandelin</i>	132B
Date 12\00					F. Wally Sandelin City Engineer R.C.E. 39895	9/25/02 Date



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Type 3 & 4 Handicap Ramps



Type 3

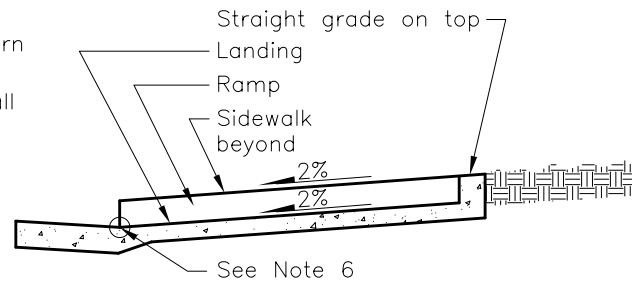
Conditions: Parkway on one street  
no parkway on the other

For 6" curb height, transition  
curb height to 4-1/2" from  
expansion to joint to beginning  
of transition.

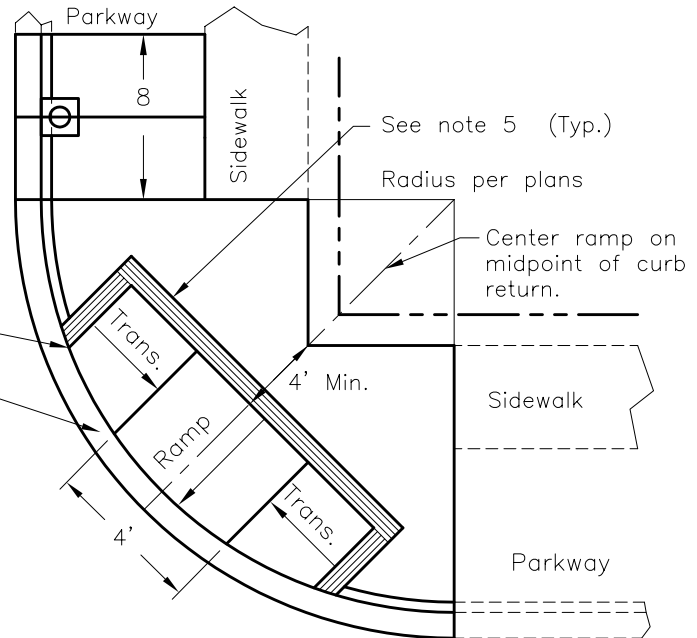
See Note 4

Notes:

1. Ramp slope 1:12 maximum, 1:15 minimum.
2. Transition slope 1:10 maximum.
3. The concrete finish of the ramp shall have a transverse, broomed, surface texture rougher than the surrounding sidewalk.
4. The gutter pan across the route of travel, from the ramp to the street, shall have a maximum rise of 5%.
5. The ramp shall have a 12" wide border with 1/4" grooves approximately 3/4" on center.
6. Transition from ramp to gutter shall be flush and free of abrupt changes. Construct 1/4" deep scoreline across ramp at flowline.
7. Retaining wall at back of ramp shall be constructed with a 6" radius at the corner.

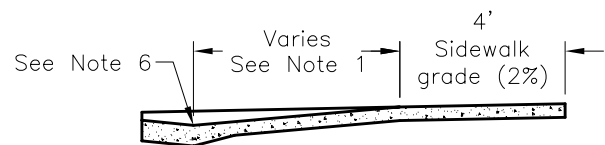


Section at Center of Return  
Type 3



Type 4

Conditions: Parkway on both streets

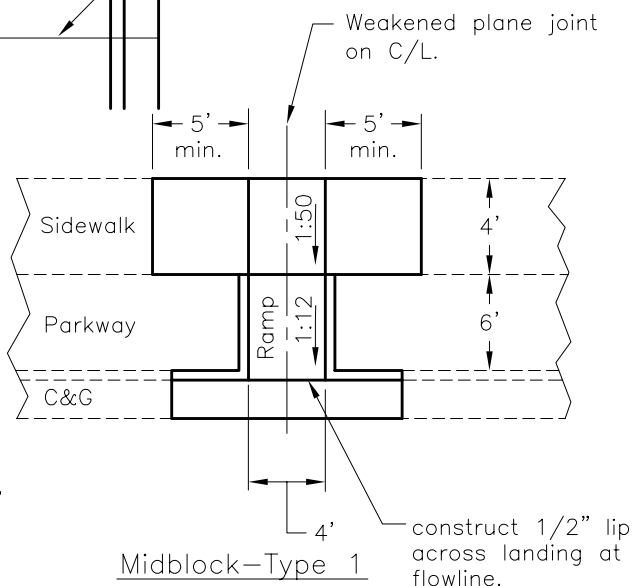
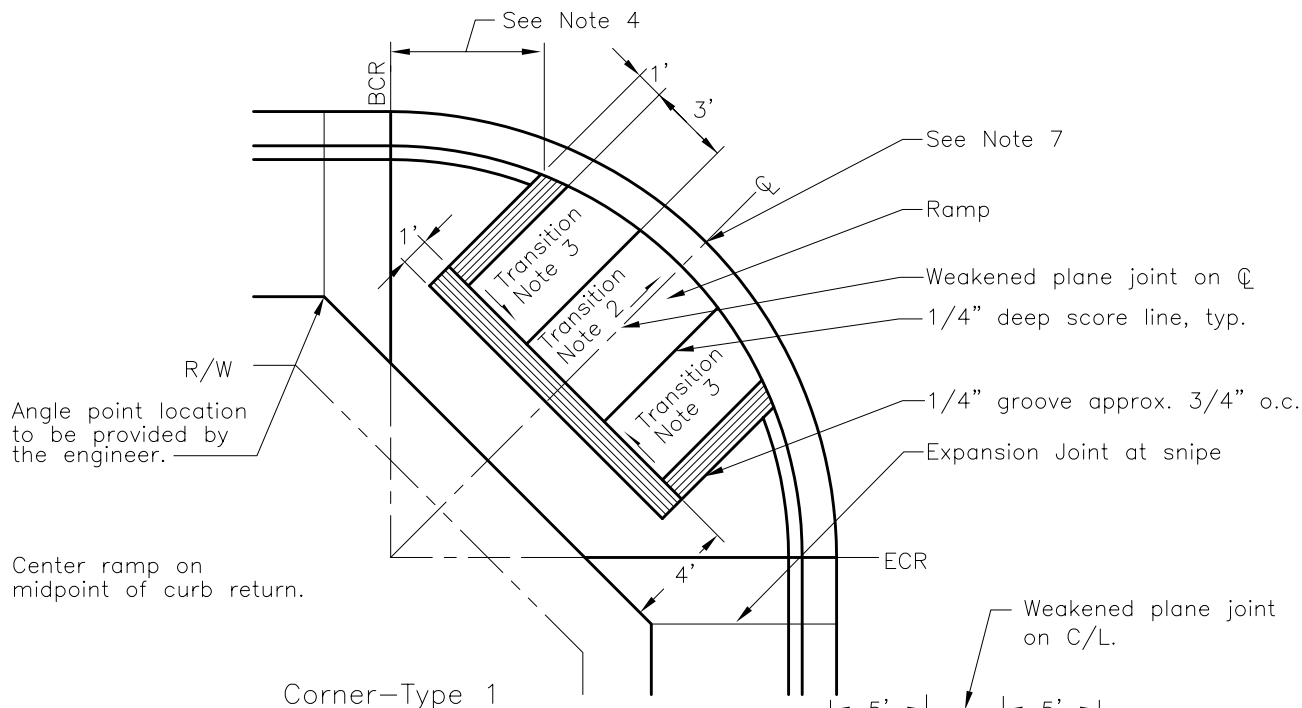
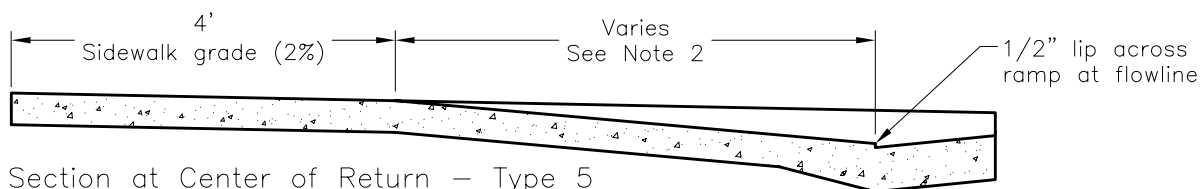


Section at Center of Return  
Type 4

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS	1	9/25	UPDATE PER FIRST REVISION		<i>F. Wally Sandelin</i>	132C
Date 12\00					F. Wally Sandelin City Engineer R.C.E. 39895	9/25/02 Date




Type 5  
Handicap Ramp



Notes:

1. Curb return radius as specified.
2. Ramp slope 1:12 maximum, 1:15 minimum.
3. Transition slope 1:10 maximum.
4. For 6" curb height, transition curb height to 4-1/2" from expansion joint to beginning of "transition".
5. See Std. Plan 611 for layout dimensions.
6. The concrete finish of the ramp shall have a transverse broom surface texture rougher than the surrounding sidewalk.
7. The gutter pan across the route of travel from the ramp to the street shall have a maximum rise of 5%.

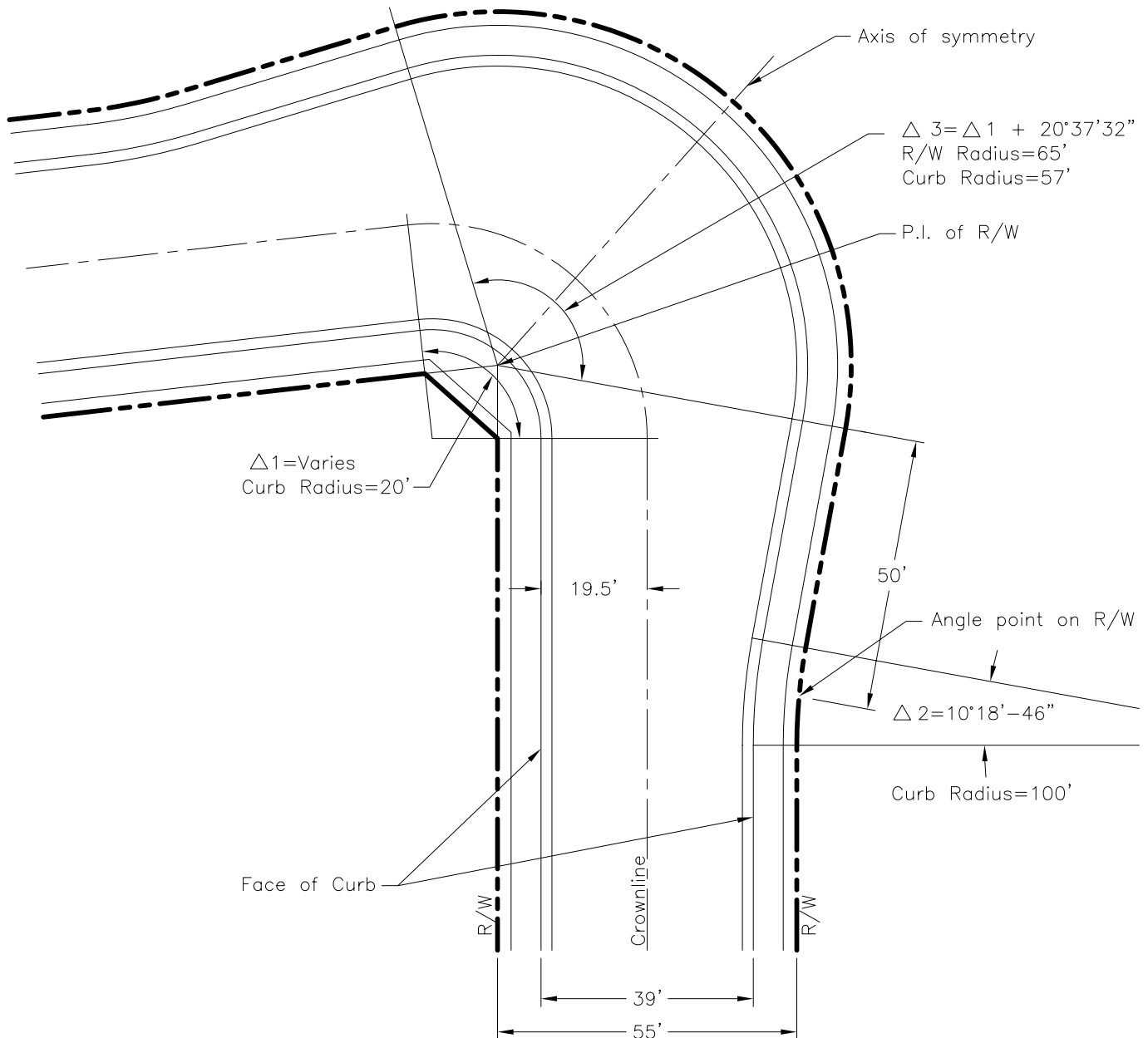
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS	1	9/25	ADDED 1/2" LIP AT FLOWLINE		 F. Wally Sandelin City Engineer R.C.E. 39895	2/12/02 Date
			REVISED MIDBLOCK LAYOUT			
Date 12/00	2	2/04	REVISED BOW DIMENSION			132D



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Residential Street Knuckle



Dr. KT	No.	Date	Revision	Appr.
Ch. WS				
Date 12\00				

Approved By: *F. Wally Sandelin*  
F. Wally Sandelin  
City Engineer  
R.C.E. 39895  
12/28/00  
Date

STD PLAN  
133





# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Parking Standards

### Notes:

1. A minimum number of parking spaces required is established by the City of Lodi Ordinance.
2. All parking stalls shall be marked in an acceptable manner.
3. Lots designed for more than four cars must have two-way access.
4. Where two parking angles can be used in a single lot, they shall be located in separate areas of the lot (except as shown on layout.)
5. Any parking layout necessitating a cul-de-sac or similar type of turning facility for reversing direction of travel in order to exit from the area or any parking spaces will generally be discouraged, and it should be approved by the City Staff prior to the incorporation into the plan.
6. Residential parking for more than four cars regardless of zoning designation shall not be designed to require backing out onto any public street Rights-of-Way.
7. Two-way traffic aisles shall be a minimum of 24 feet wide.
8. In any non-residential parking condition parking or backing area within a parking lot shall not extend into the public Rights-of-Way, regardless of zoning designation.
9. When a long driveway having only a single ingress is necessary within a development, provisions should be made for the maneuvering of emergency vehicles and the arrangement approved by City Staff prior to its incorporation into the plan.
10. All parking lots shall have an adequate structural section and shall be paved with a minimum of two inches of asphalt concrete.
11. All unusable areas shall be landscaped where practical.
12. Landscaped areas within or adjacent to the parking area shall provide for a minimum of one shade tree for every four parking stalls. Depending on type and size of shade tree, requirements may be modified by the City Site Plan and Architectural Review Committee.
13. Six-inch high concrete curbs shall separate all paved and landscaped areas.
14. Concrete curbing shall be used as wheel stops where possible. The use of bumper blocks is discouraged.
15. Landscaped areas shall be provided between asphalt areas and all building structures, fences and property lines. Hardscaping may be used where pedestrian access is a necessity as determined by the City Site Plan and Architectural Review Committee.
16. Landscaping shall conform to the City of Lodi Landscape Guidelines.
17. End stalls should be protected from the turning movements of other cars with a minimum 5' landscape planter.
18. Handicapped stalls shall be a min. of 9' wide plus an adjacent 8' min. access zone to accommodate Van accessible parking. If there is more than one stall at least one must meet the Van accessible size. The additional stalls shall be a min. of 9' wide plus an adjacent 5' min. access zone, per title 24, Chapter 2-7102, California Administrative Code.
19. End stalls and stalls adjacent to curbing shall be a minimum of ten feet wide.
20. Dead end 90° parking shall be provided with adequate turning room.
21. Parking requirements for the interior of parking lots on industrial lots surrounded solely by heavy industrially zoned properties may be modified by the Site Plan and Architectural Review Committee.

Reference: Planning Commission Resolution 77-2, 7/11/77

Sheet 2 of 2

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS	1	2/10	TEXT ADDITION & REVISION		<i>F. Wally Sandelin</i>	134
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	2/2/04 Date

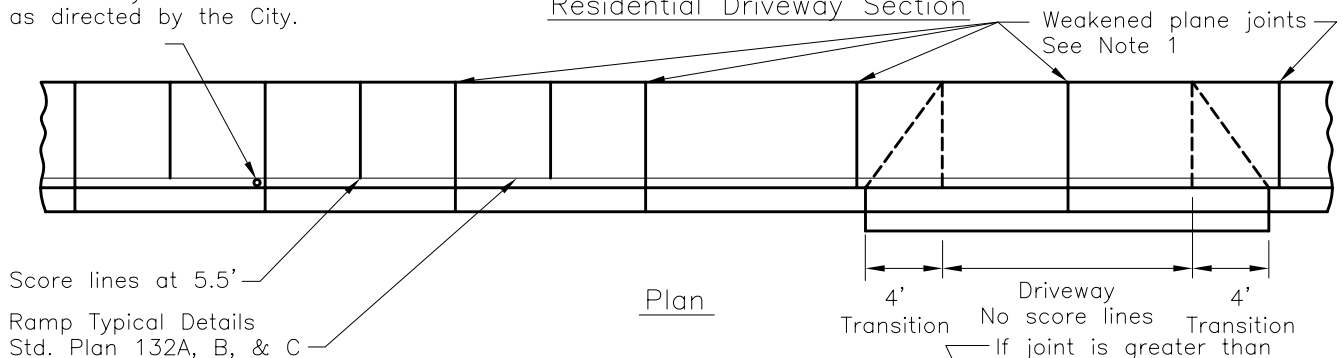
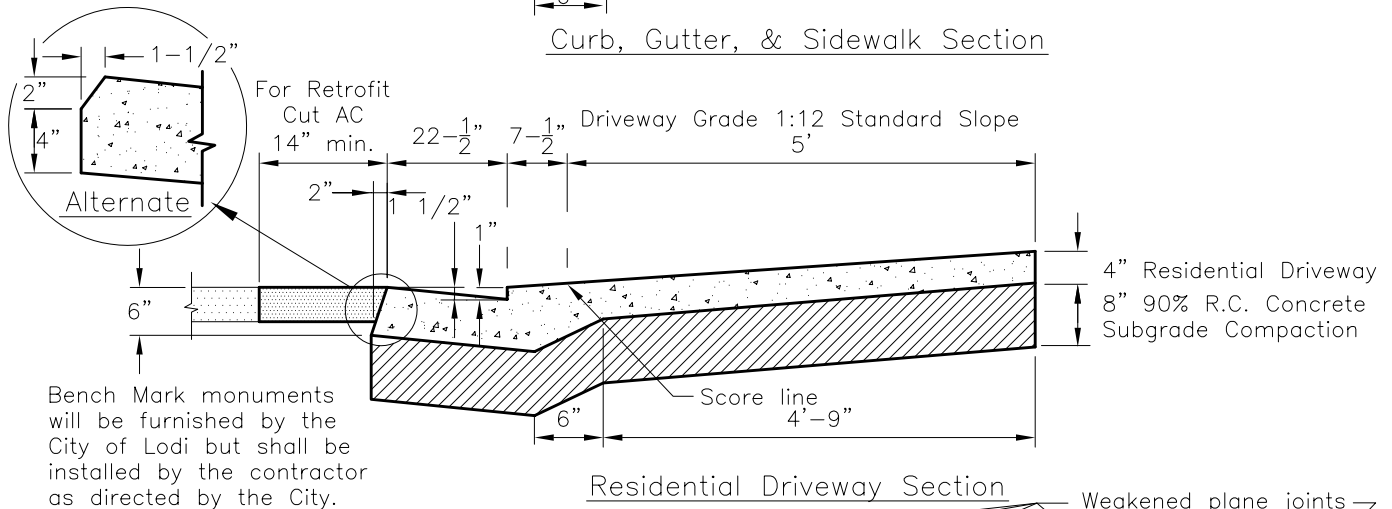
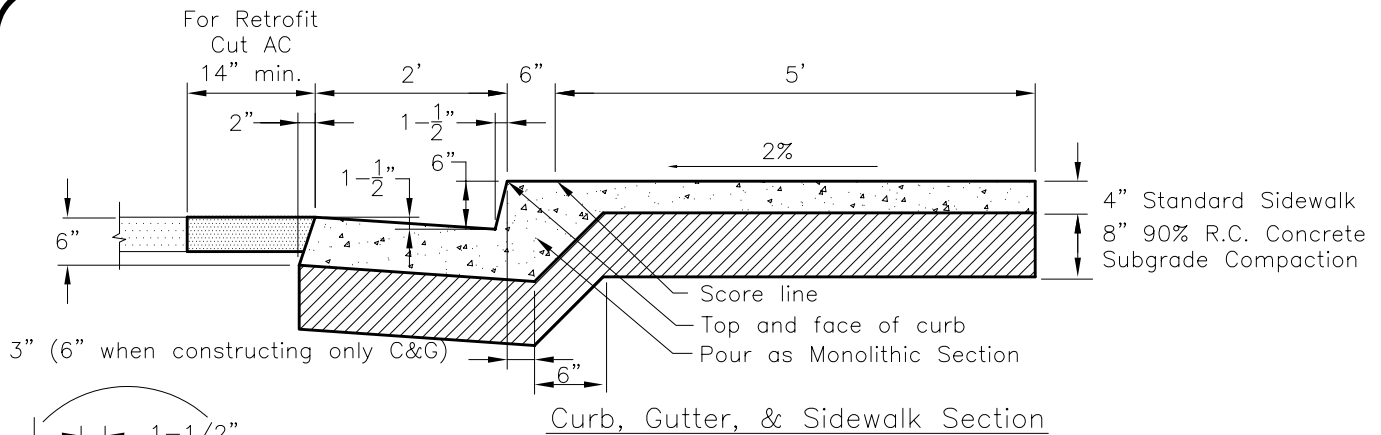




# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Vertical-Type Curb, Gutter, Sidewalk and Residential Driveway



### Notes:

1. Construct weakened plane joints at 11' and at centerline of driveway.
2. Use impervious membrane cure. Broom finish.
3. Class B concrete per Section 90 of Std. Spec., 1-1/2" max. aggregate.
4. Construct expansion material at 200' max.
5. All exposed edges shall be rounded to 1/2" radius.

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS	1	9/25	ADDED CURB HEIGHT		<i>F. Wally Sandelin</i>	135
Date					9/25/02	
12/00					Date	
					R.C.E. 39895	



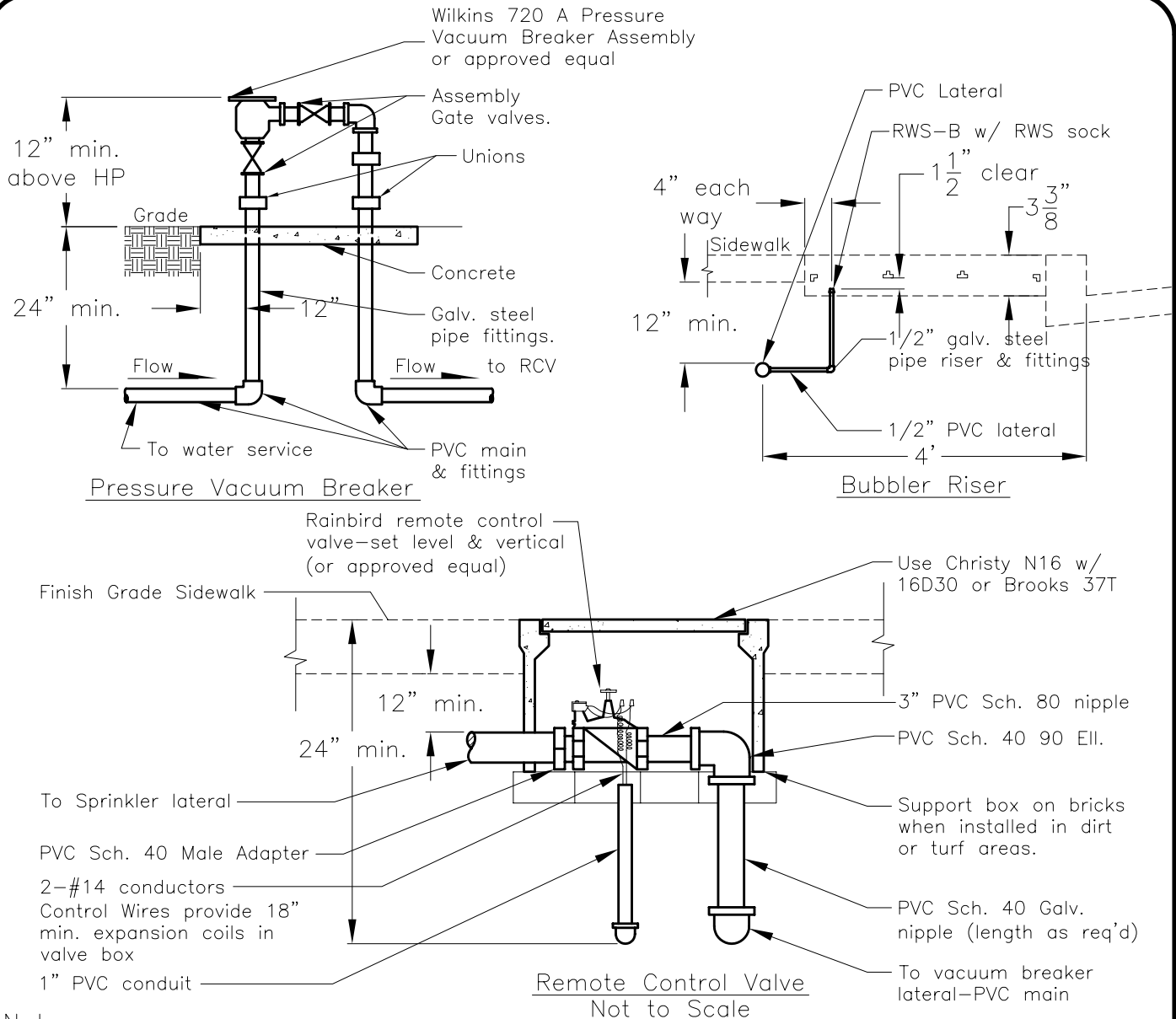
136



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Tree Well Sprinkler System Installation



### Notes:

1. Use Rainbird, or Irri-trol sprinkler system controller, disconnect switch required. Install controller and disconnect in post mounted, weatherproof cabinet (w/hasp for City padlock). Breaker box must accommodate City Master padlock and must be made of metal.
2. Plastic pipe shall be Polyvinyl Chloride (PVC), Type 1120 or 1220. Class per Table. Threaded pipe shall be Schedule 80 PVC. Fittings shall be molded, medium weight, Schedule 40 PVC. Street crossings, including control wire conduit, shall be steel pipe.
3. Steel pipe shall conform to ASTM A-120 and shall be Schedule 40, galvanized. Fittings shall be 150 lbs., banded pattern, galvanized malleable iron.
4. Control wires shall be installed in 1" conduit.

Sheet 1 of 2

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS	1	2/04	CHANGED NOTATION AND REVISED NOTE 1		<i>F. Wally Sandelin</i>	137
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	2/12/04 Date



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Tree Well Sprinkler System Installation

PVC Pipe Class Table	
Size	Class
In turf/planter	
1/2"	Class 315 PVC
3/4"	Class 200 PVC
1"+	Class 160 PVC
Mainline (constant pressure)	
2"+	Class 200 PVC
Under concrete or paving	
All	Schedule 80

Sheet 2 of 2

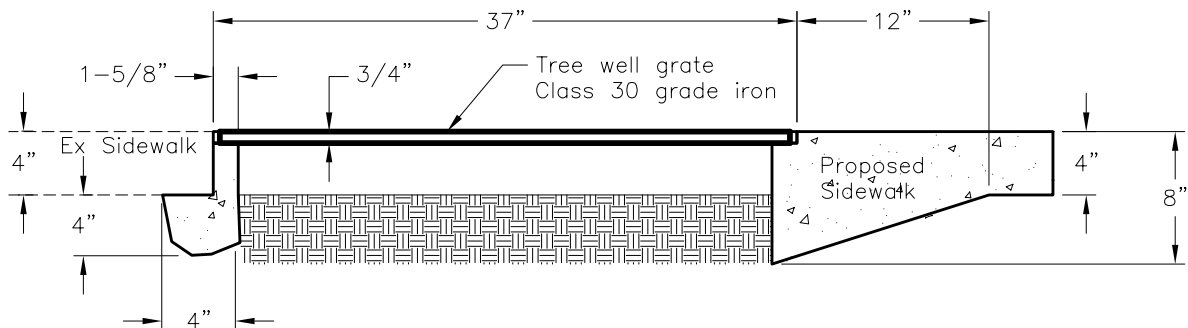
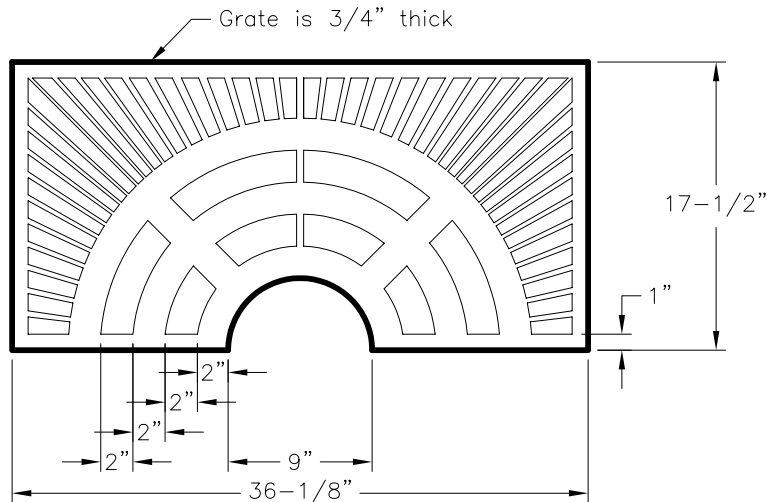
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					M:\OPEN\PROJECTS\Seals&Sign\Wallysign.tif	
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date
						137



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Grated Tree Well



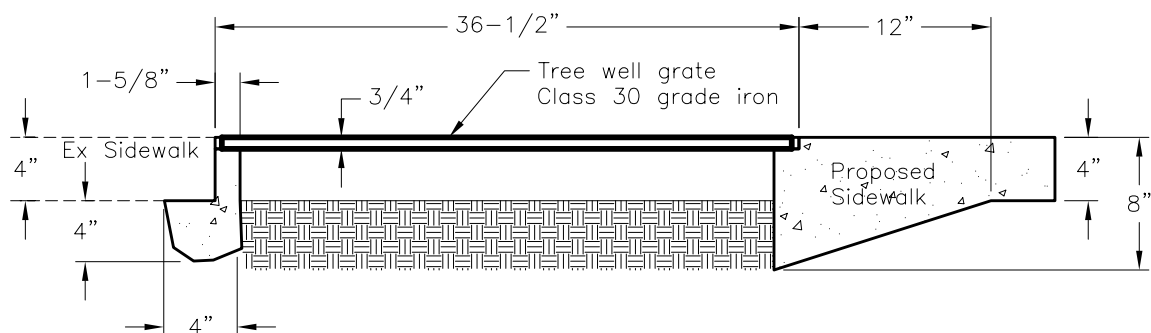
### Notes:

1. If the tree is not planted, the opening shall be barricaded.
2. When tree wells are installed in the existing sidewalk, the sidewalk shall be sawed a minimum of 1-1/2" in depth.
3. Place one #4x2' rebar diagonally at each corner.
4. Reinforcing steel shall not be placed through sidewalk weakened plane joints.

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	138A
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date



A technical drawing of a semi-circular arch. The arch is composed of multiple segments, with a central vertical line indicating the axis of symmetry. The height of the arch is dimensioned as 18 inches. The drawing is enclosed in a rectangular frame.



1. If the tree is not planted, the opening shall be barricaded.
2. When tree wells are installed in the existing sidewalk, the sidewalk shall be sawed a minimum of 1-1/2" in depth.
3. Place one #4x2' rebar diagonally at each corner.
4. Reinforcing steel shall not be placed through sidewalk weakened plane joints

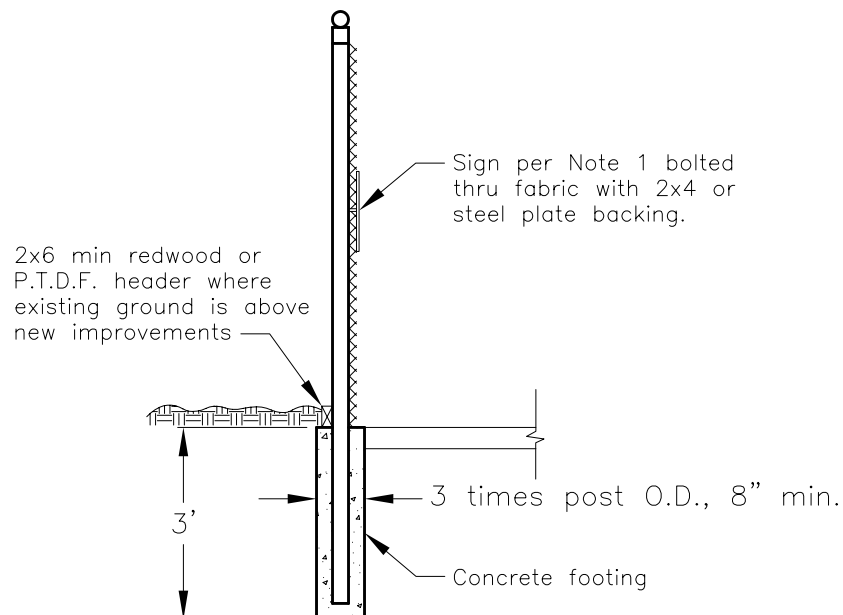
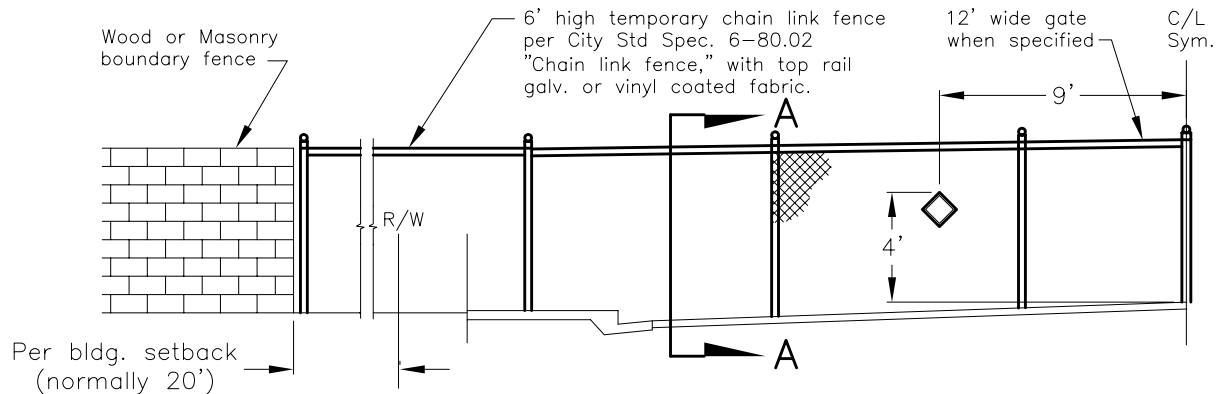
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sangelin</i> 12/28/00	138B
Date 12/00					F. Wally Sangelin City Engineer Date R.C.E. 39895	



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Dead-end Barricade (Fence Type)



Section A-A

### Notes:

1. Install two fully reflective red Type N Markers, 18"x18".  
Backing: 0.080" aluminum 6061T6 alloy  
Reflectorization: high intensity grade  
Mounting: two 5/16" bolts with double nuts and backing, bend bolts.
2. Serviceable portions of barricades being removed may be reused at new location as approved by the Engineer.

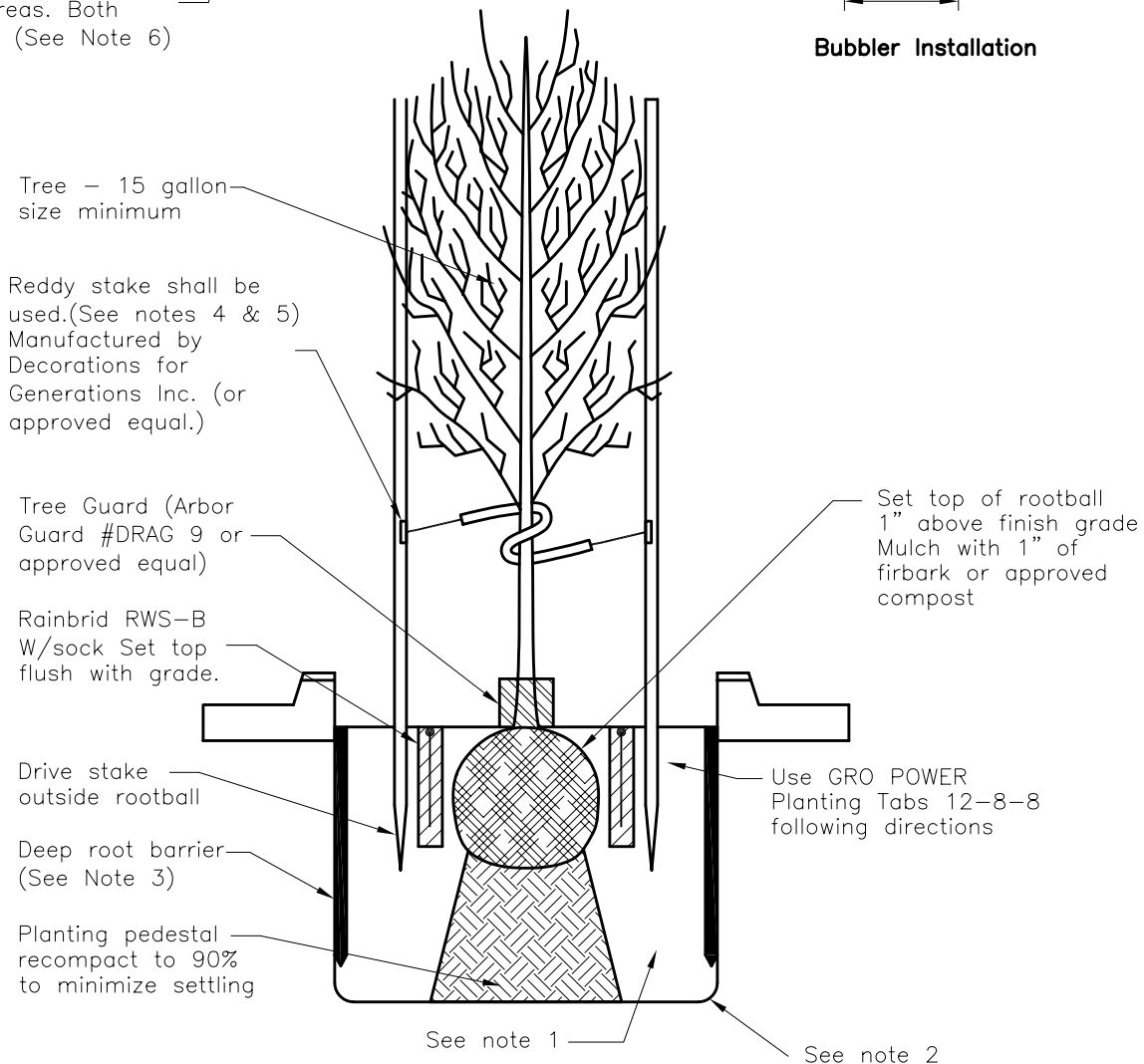
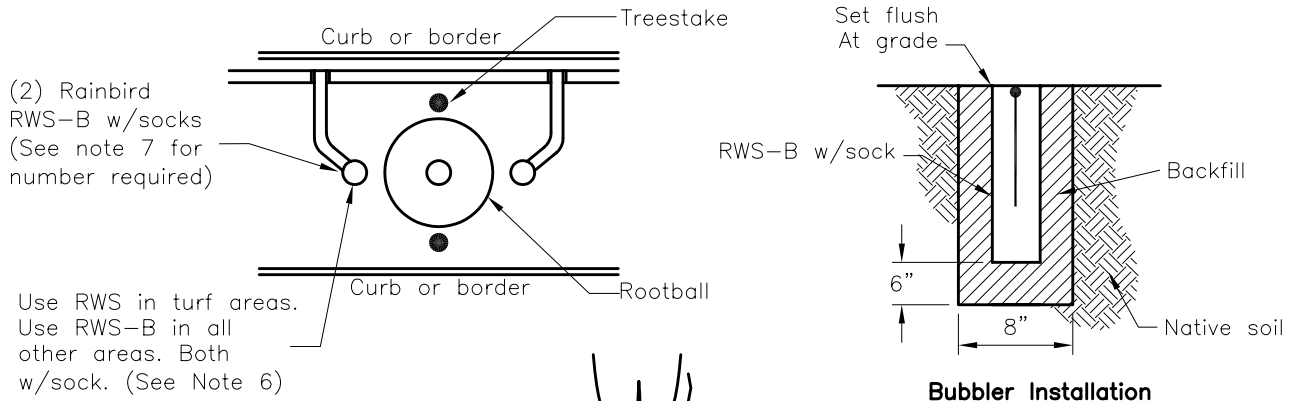
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	139
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Tree/Tree Well Planting and Tree Irrigation



Sheet 1 of 2

Dr.	KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
		1	9/25	ADDED NOTES 7 THRU 10 &			
	Ch.			REVISED NOTES 3 & 4			
		2	2/04	REVISED BUBBLER MODEL #'S			
	Date		12/00	AND TREE STAKE MODEL			
						F. Wally Sandelin City Engineer R.C.E. 39895	2/12/04 Date
							140





# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Tree/Tree Well Planting and Irrigation Notes

### Notes:

1. When soil analysis is required (by City officials prior to job commencement), all backfill soil shall have additional fertilizer and amendments per soil analysis. All backfill to be clean (preferred native, no % by volume approved compost, to be placed firmly but uncompacted. imported soil) amended with 10 Thoroughly soak with water to settle.
2. The entire tree planting area (tree well, island, or strip) shall be free of deleterious materials including concrete and rocks. The pit shall be a minimum of two times wider and only deep enough for the tree to be 1" above grade Scarify Planting Pit And All Four Sides Of Rootball Prior To Planting.
3. Six (6) panels of 24" x 24" Deep Root root barrier (Model #DRUB24, or approved equal) will be required around tree planting area. Place 3 panels at back of curb and 3 panels along edge of sidewalk.
4. Additional T-bar rod or second ready stake shall be used to hold tree upright. The size of Ready steak shall match size of tree.
5. Remove nursery stake when setting new stakes.
6. Air tubes shall be set immediately next to the root ball. Apply approved pre-emergent herbicide prior to placement of fir bark or mulch.
7. Install three (3) RWS-B air tubes in tree well locations larger than 5' by 5' and install two (2) RWS-B air tubes in planter strip areas or area less then 5' by 5'. Air tubes to be a minimum 18 inches in length.
8. If a discrepancy between this standard and actual on-site conditions occurs, the Contractor is to notify the City Representative immediately, before proceeding with his work, for a decision. The City reserves the right to make deletions, additions, or substitutions in the field as necessary.
9. All trees must meet the standards set forth in ANSI Z60.1 - 1996, (or latest revision) American Standards for Nursery Stock. Particular attention should be paid to section 1.4 container grown specifications. All trees will be inspected for acceptable form and condition by the City Tree Operations Supervisor prior to planting. Contact Tree Operations Supervisor at 333-6740 for tree inspection and approval. Unacceptable trees will be replaced by the contractor.
10. City Tree Operations Supervisor and Public Works Inspector shall be notified at least two working days prior to estimated time of setting-out trees so a mutually acceptable time can be scheduled for final tree placement. All trees shall be placed in approximate locations shown on plans by Contractor prior to arrival of city personnel. Final adjustments of locations shall be made by City personnel.
11. Tree spacing shall be the following minimum spacing distances:  
Trees: 25'-0" O.C. min.  
Trees to Street Lights 10'-0" O.C. min.  
Trees to Service Laterals: 5'-0" O.C. min.

Sheet 2 of 2

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
	1	9/25	ADDED NOTES 7 THRU 10 &			
Ch. WS			REVISED NOTES 3 & 4			
Date	2	2/04	REVISED NOTES 2, 4 & 7			
12/00						

*F. Wally Sandelin*  
F. Wally Sandelin  
City Engineer  
R.C.E. 39895

2/12/04  
Date

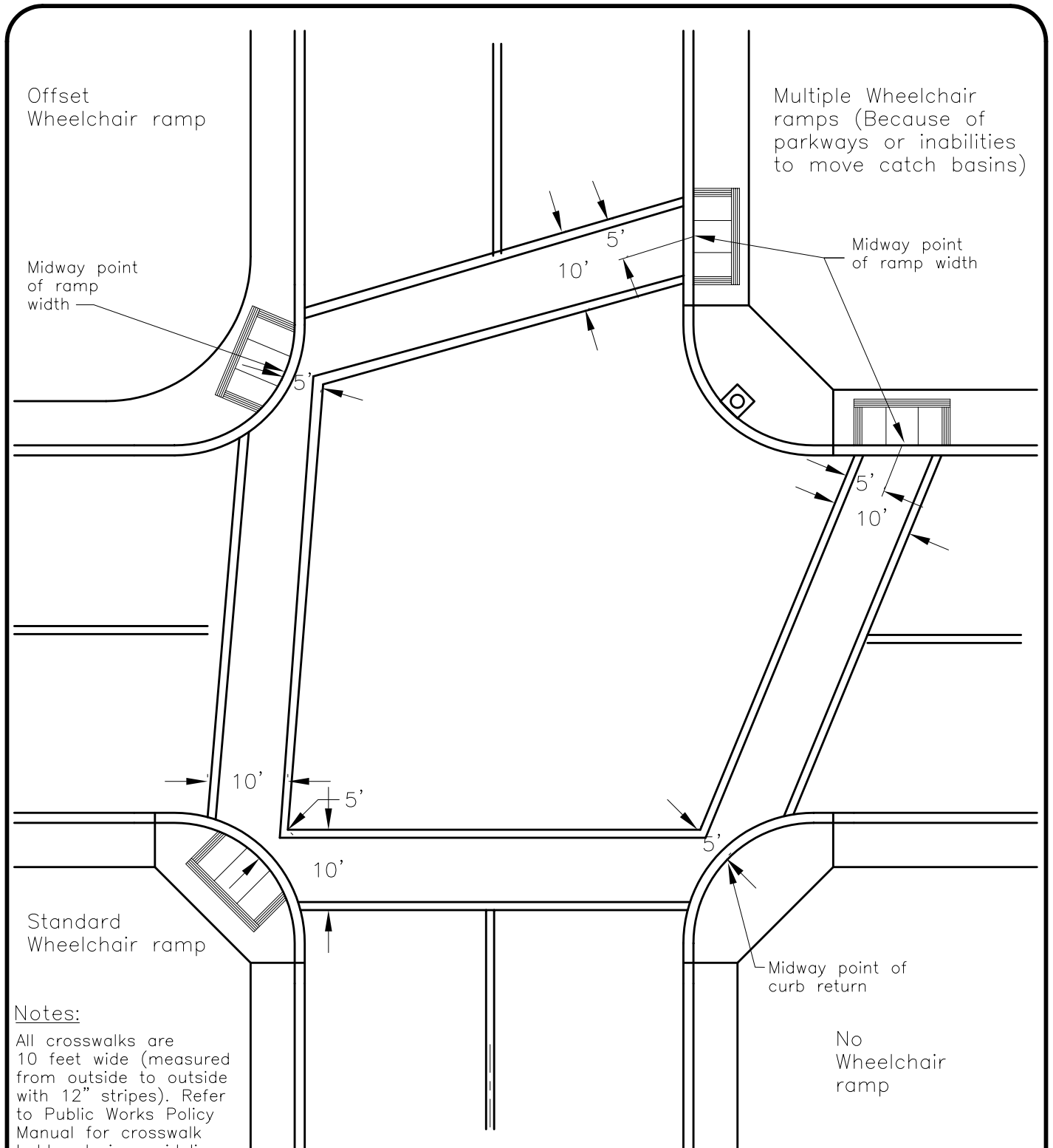
140



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Various Crosswalk Layouts



### Notes:

All crosswalks are 10 feet wide (measured from outside to outside with 12" stripes). Refer to Public Works Policy Manual for crosswalk ladder design guidelines

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	141
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date

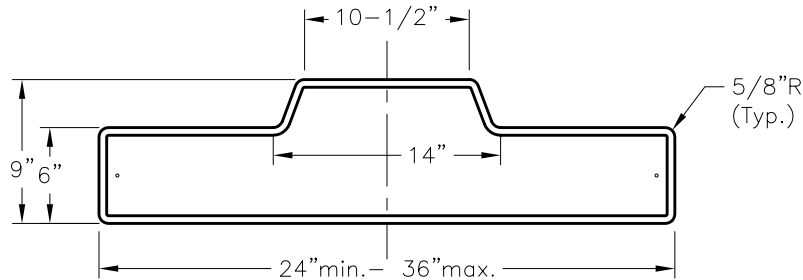


# CITY OF LODI

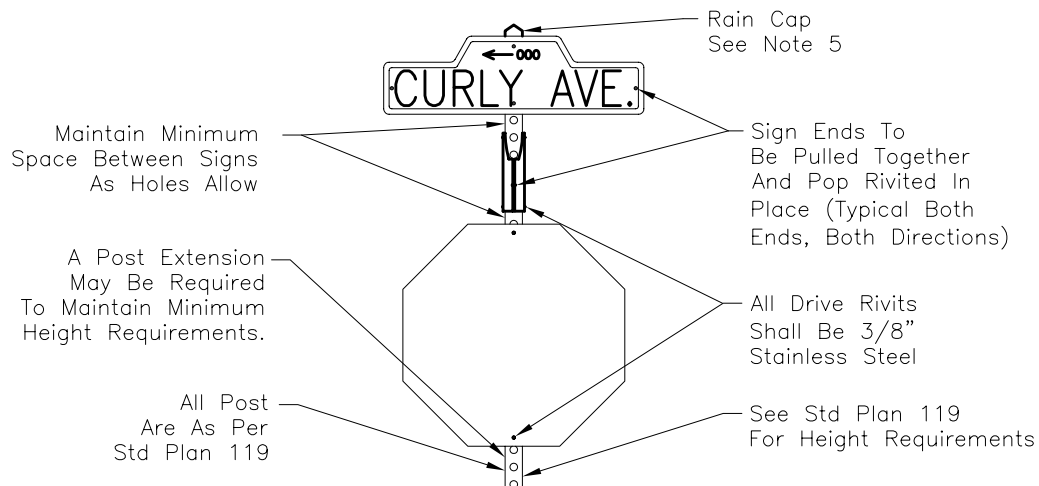
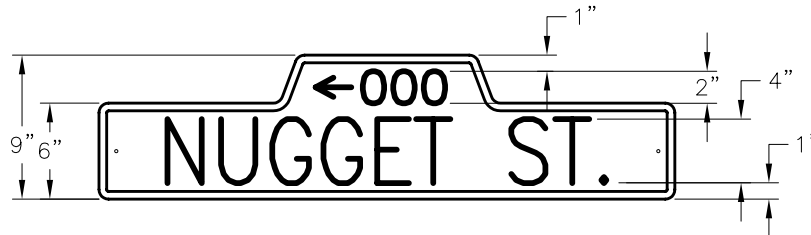
PUBLIC WORKS DEPARTMENT

## Street Name Sign System

Plate: 0.063" Aluminum panel—White engineer grade reflective background with 1/4-inch non reflective black border inset 1/4-inch.



Legend: 4" upper case street name & 2" block number with 1-3/4" arrow (all black).



## SIGN MOUNTING:

### Notes:

1. Block Numbers Shall Be Rounded To The Nearest Hundred.
2. Block Arrow Shall Point In The Direction Of The Block; Not Across The Street.
3. When Cardinal Direction Is Part Of The Street Name, A 2" Upper Case Initial Shall Follow The Block Number, (I.E. 00N, 00S, 00E, 00W).
4. Legend Shall Be Black And Non-Reflective.
5. Cap Post With Square Rain Cap. Post Top Shall Be 1 1/2" Higher Than Top Of Sign.

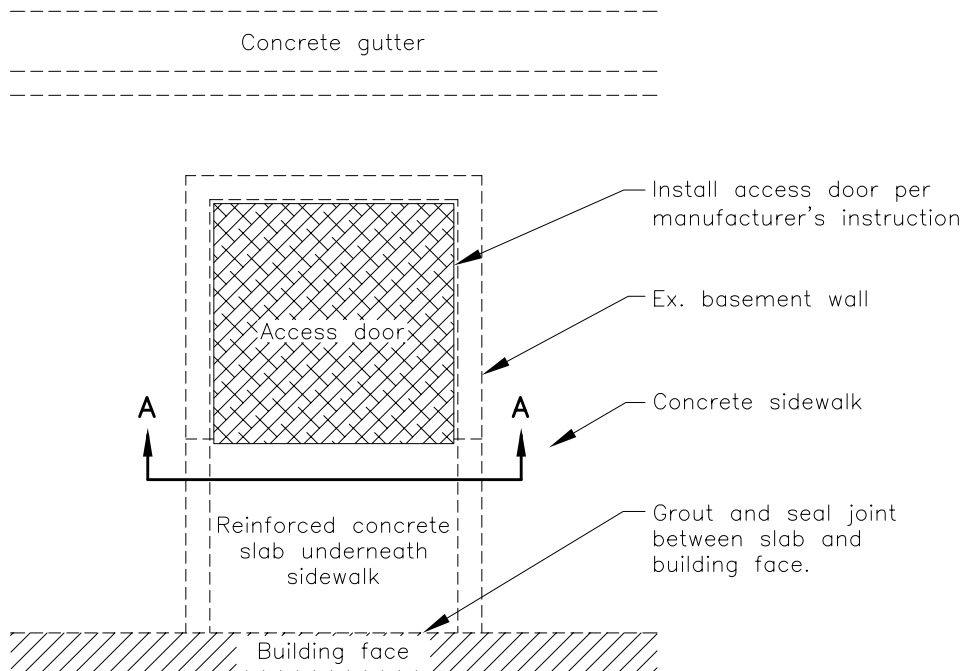
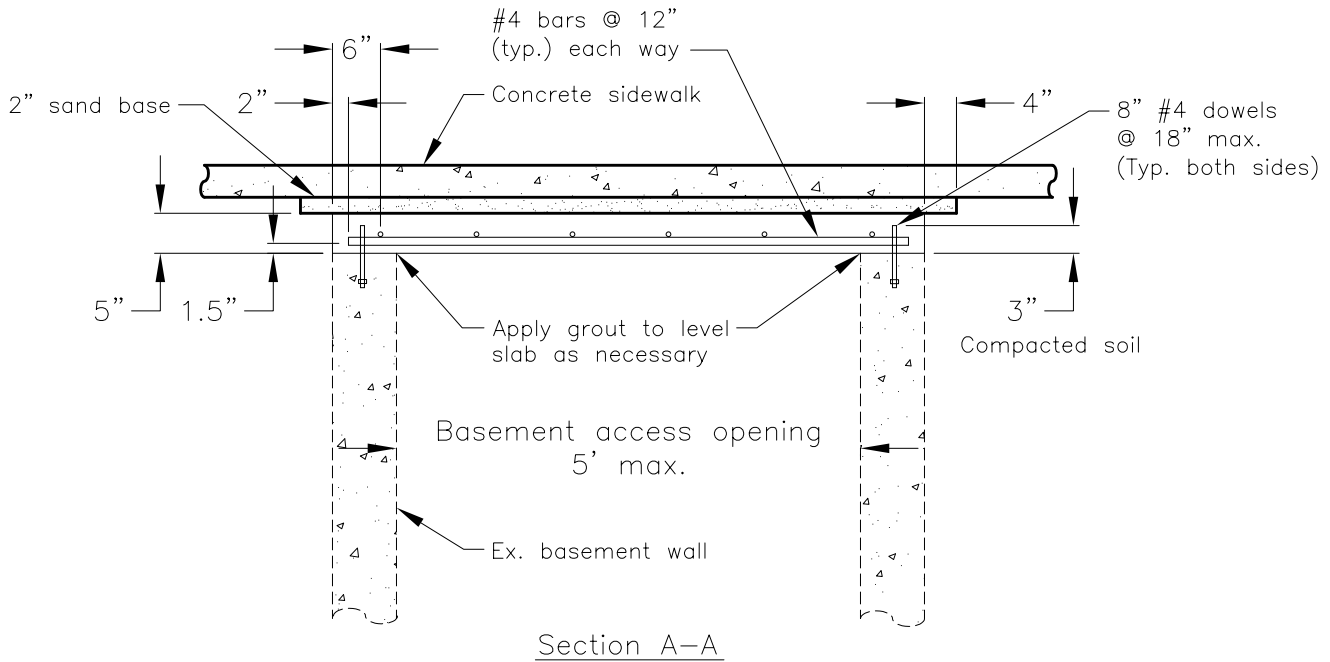
Dr. KG	No. 1	Date 9/25	Revision CHANGED TO SQ POST	Appr.	Approved By: <i>F. Wally Sandelin</i>	STD PLAN
Ch. WS					F. Wally Sandelin City Engineer R.C.E. 39895	142
Date 12/00					9/25/02 Date	



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Concrete Slab for Basement Access Spanning Detail



### Notes:

1. All steel reinforcements shall be Grade 40 minimum.
2. All concrete shall have a minimum strength of 2,500 psi @ 28 days.

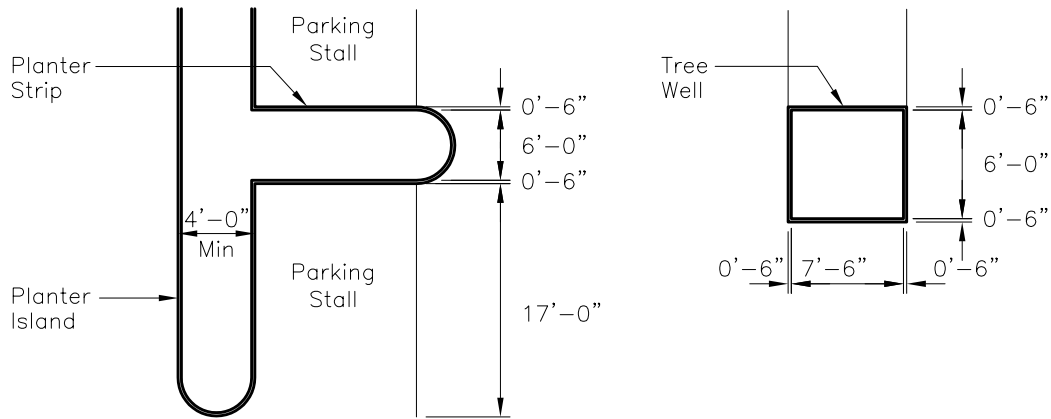
Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	143
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	12/28/00 Date



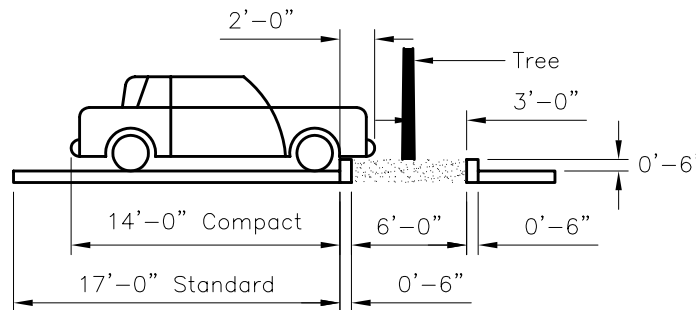
# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## Parking Lot Planters and Tree Wells



Planter Specification



Poured Curb with Overhang

### Notes:

1. Minimum Planter Sizes: A minimum 6'-0" by 6'-0" planting area shall be provided for each tree planted in a tree well or planter strip. A minimum 4'-0" by 8'-0" planting area shall be provided for each tree planted in an island planter. Planter dimensions are measured from the interior side of the curb. (See illustration)
2. Tree must be planted behind the curb at a distance no less than one half the minimum planter width or otherwise recommended by the city's arborist. A 2'-0" foot overhang for vehicles into the planter area is allowed as long as it does not overhang planter width or otherwise recommended by the city's arborist. A 2'-0" foot overhang into the planter area is allowed as long as it does not overhang within the required parking lot setback area or pedestrian walkway.
3. Materials: Planters shall contain soil, shrubs and/or living ground cover with 4" of bark mulch. Interlocking pavers and decomposed granite may also be utilized in heavily used areas.

Dr. KT	No.	Date	Revision	Appr.	Approved By:	STD PLAN
Ch. WS					<i>F. Wally Sandelin</i>	145
Date 12/00					F. Wally Sandelin City Engineer R.C.E. 39895	9/25/02 Date



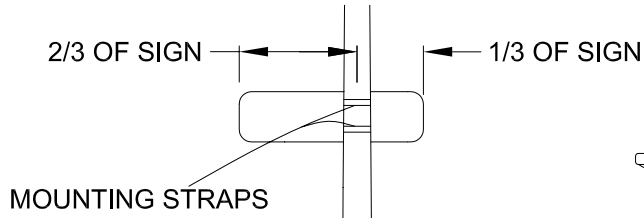
# CITY OF LODI

PUBLIC WORKS DEPARTMENT

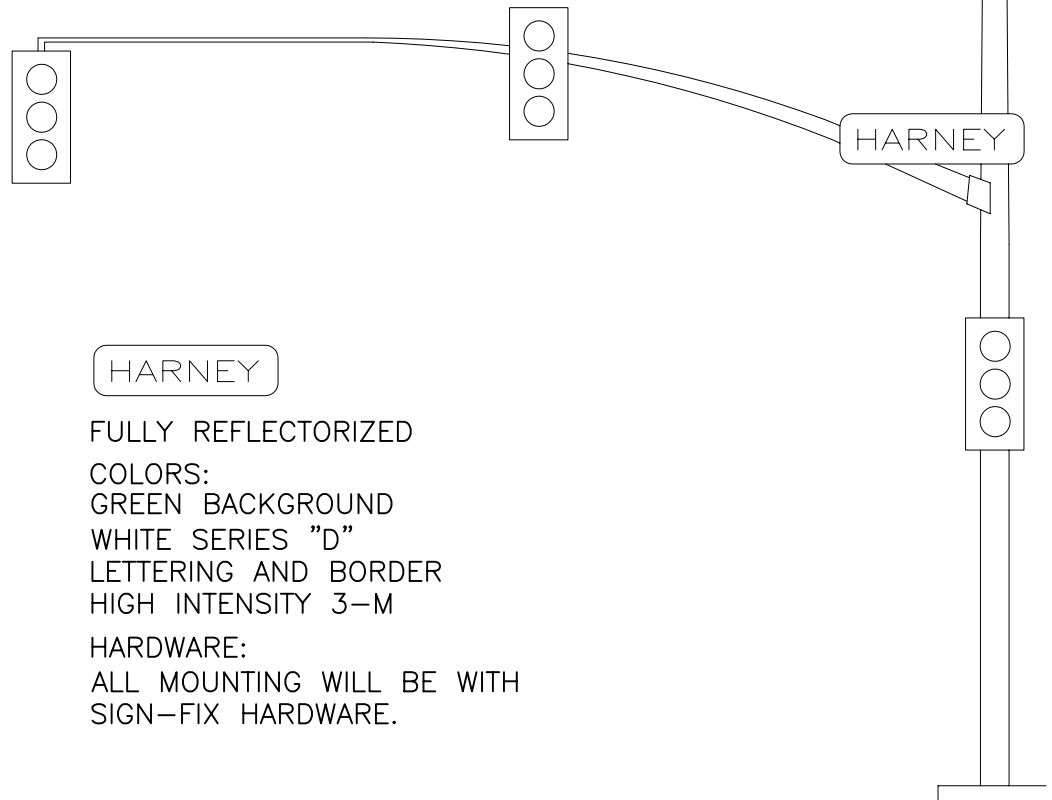
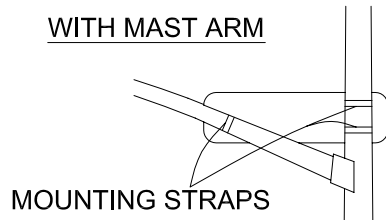
## STREET NAME SIGN MAST ARM MOUNTING DETAILS

### MOUNTING DETAILS

#### NO MAST ARM



#### WITH MAST ARM



HARNEY

FULLY REFLECTORIZED

COLORS:  
GREEN BACKGROUND  
WHITE SERIES "D"  
LETTERING AND BORDER  
HIGH INTENSITY 3-M

HARDWARE:  
ALL MOUNTING WILL BE WITH  
SIGN-FIX HARDWARE.

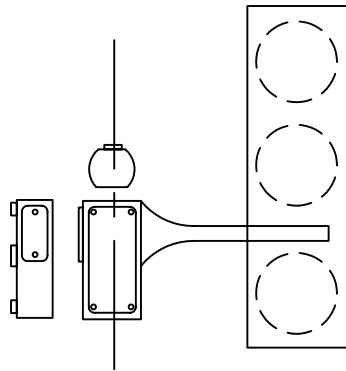
Dr. JSB	No.	Date	Revision	Appr.	Approved By: <i>F. Wally Sandelin</i> F. Wally Sandelin City Engineer R.C.E. 39895	2/12/04 Date	STD PLAN 146
Ch. PJF							
Date 2/04							



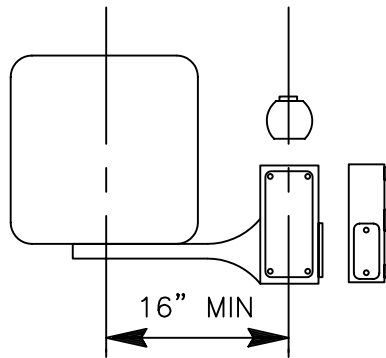
# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## UNIMOUNT MOUNTING HARDWARE DETAILS



TYPICAL VEHICLE SIGNAL MOUNTING



TYPICAL PEDESTRIAN SIGNAL MOUNTING

NOT TO SCALE

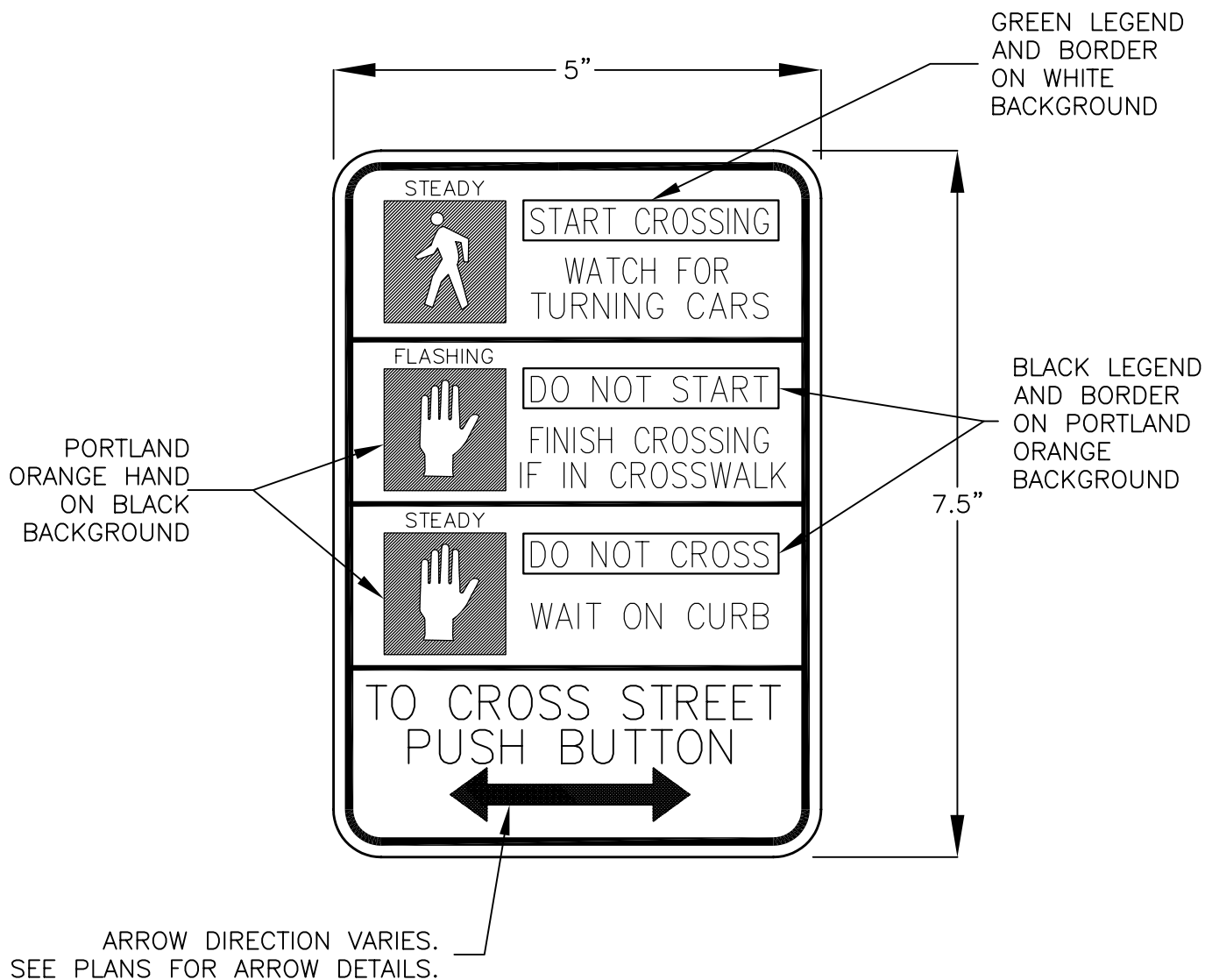
Dr. JSB	No.	Date	Revision	Appr.	Approved By: <i>F. Wally Sandelin</i> F. Wally Sandelin City Engineer R.C.E. 39895	STD PLAN
Ch. PJF					2/12/04 Date	147
Date 2/04						



# CITY OF LODI

PUBLIC WORKS DEPARTMENT

## PEDESTRIAN PUSH BUTTON SIGN DETAIL



### SPECIAL SIGN FOR PED PUSH BUTTONS

N.T.S.

Dr. JSB	No.	Date	Revision	Appr.	Approved By: <i>F. Wally Sandelin</i>	STD PLAN
Ch. PJF					F. Wally Sandelin City Engineer R.C.E. 39895	148
Date 2/04					2/12/04 Date	